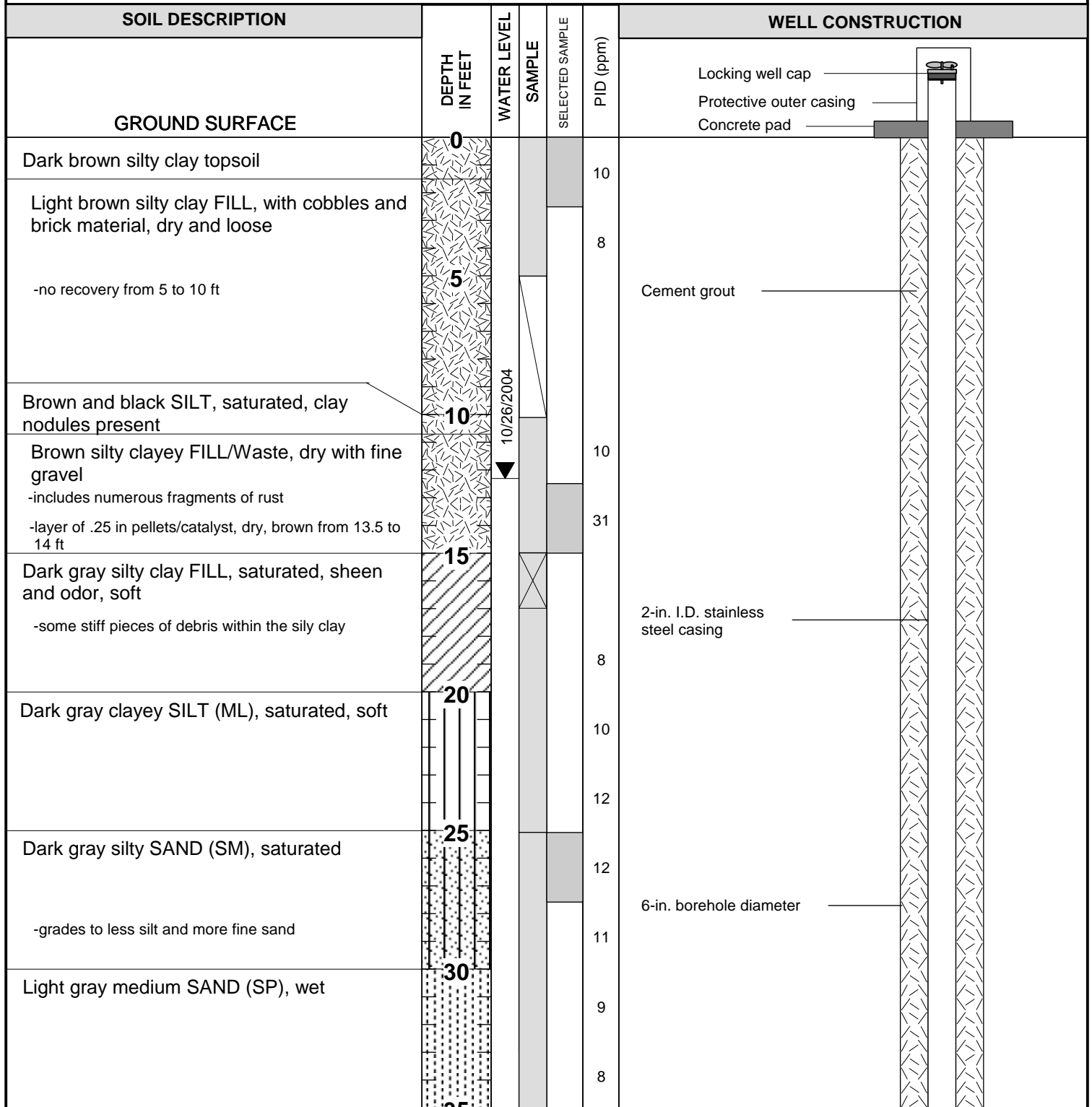


APPENDIX F

BORING LOGS AND AS-BUILT DIAGRAMS FOR A1-1 THROUGH A1-19

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (w/ 7 inch override casing to 20 ft bgs)

COMPLETION DATE: October 7, 2004
 GROUND SURFACE ELEV.: 408.4 ft MSL
 TOP OF CASING ELEV.: 410.46 ft MSL
 COORDINATES: N 699829.6 ft ; E 2295569.9 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

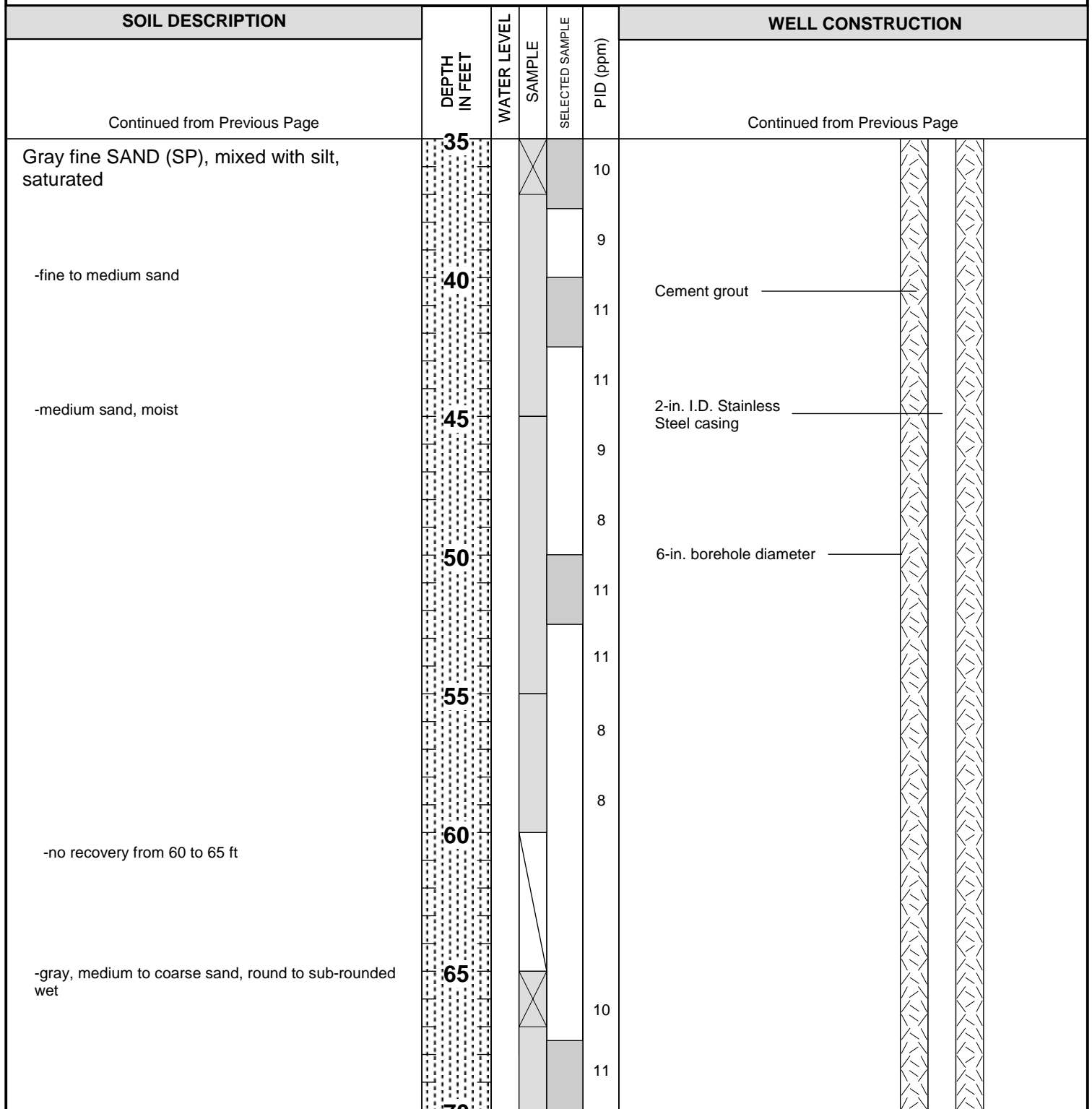
A1-1

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 7, 2004
 GROUND SURFACE ELEV.: 408.4 ft MSL
 TOP OF CASING ELEV.: 410.46 ft MSL
 COORDINATES: N 699829.6 ft ; E 2295569.9 ft



Continued on Next Page

LOG & AS-BUILT DIAGRAM

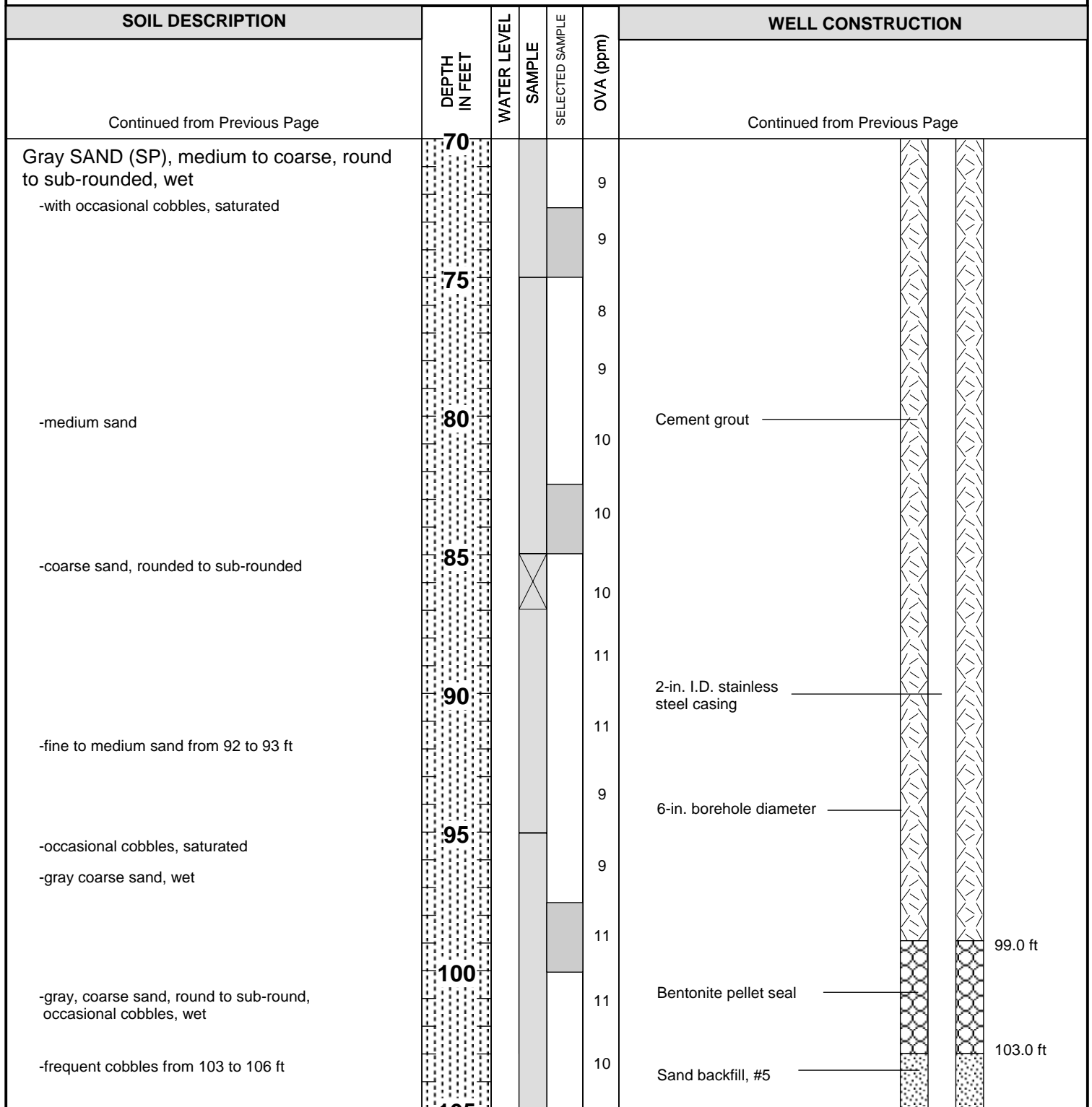
A1-1

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 7, 2004
 GROUND SURFACE ELEV.: 408.4 ft MSL
 TOP OF CASING ELEV.: 410.46 ft MSL
 COORDINATES: N 699829.6 ft ; E 2295569.9 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

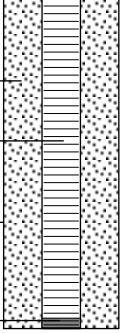
A1-1

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

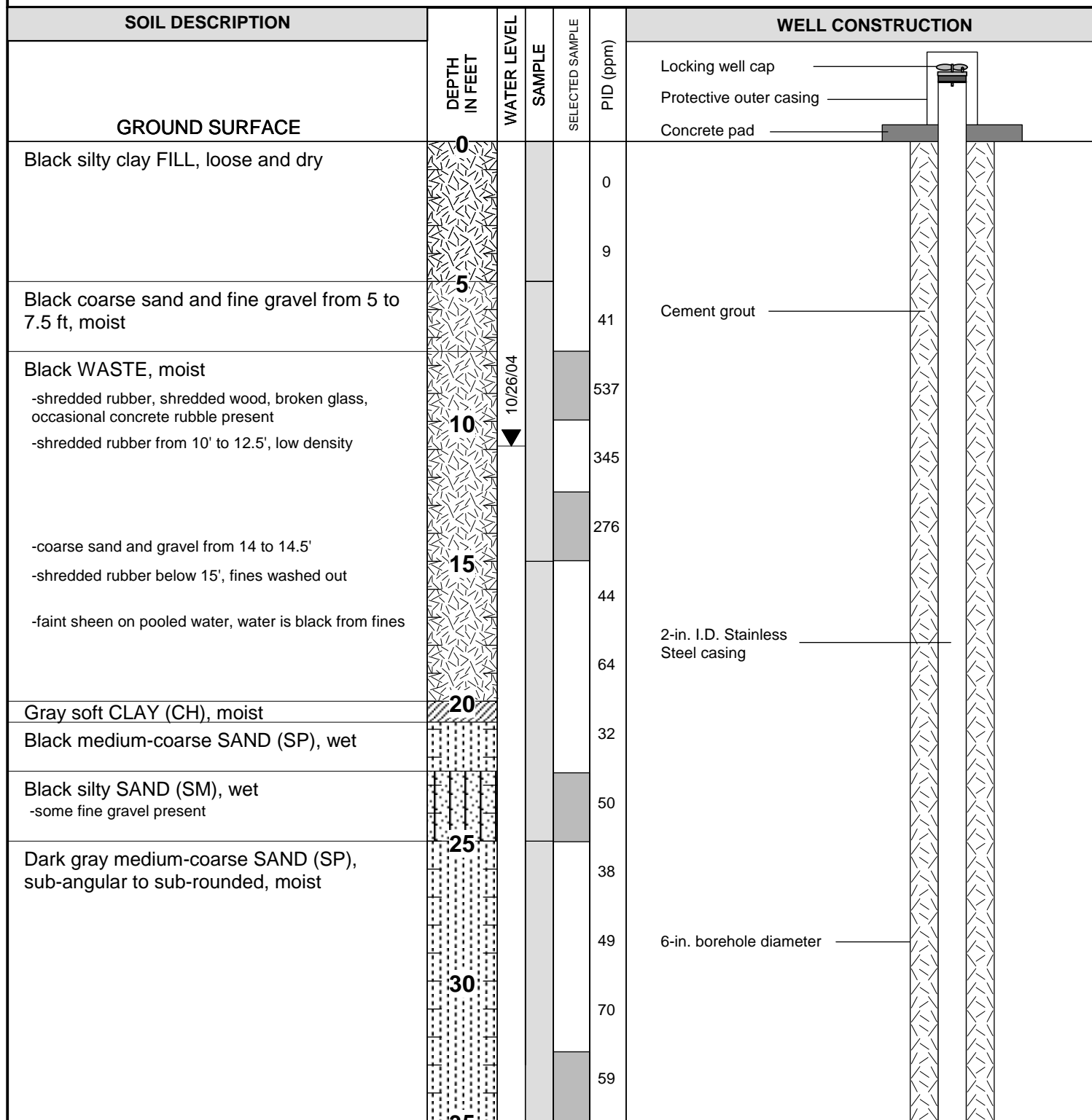
GEOLOGIST: Tim Nickels
 DRILLER: Geral Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 7, 2004
 GROUND SURFACE ELEV.: 408.4 ft MSL
 TOP OF CASING ELEV.: 410.46 ft MSL
 COORDINATES: N 699829.6 ft ; E 2295569.9 ft

SOIL DESCRIPTION		DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION	
Continued from Previous Page							Continued from Previous Page	
Gray SAND (SP), coarse, rounded to sub-rounded, with occasional cobbles, wet		105				12	 <p>Sand backfill, #5</p> <p>2-in. I.D. stainless steel screen, No. 10 slot</p> <p>6-in. borehole diameter</p> <p>Bottom plug</p> <p>113.5 ft</p>	
Limestone bedrock -no recovery		110						
Total Depth = 113.5 ft		115						
		120						
		125					<p>Notes:</p> <p>1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.</p> <p>2) Elevations are NAVD 88 in feet.</p> <p>3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.</p>	
		130						
		135						
		140						

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 12, 2004
 GROUND SURFACE ELEV.: 405.5 ft MSL
 TOP OF CASING ELEV. 408.6 ft MSL
 COORDINATES: N 700221.4 ft ; E 2295355.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-02

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 12, 2004
 GROUND SURFACE ELEV.: 405.5 ft MSL
 TOP OF CASING ELEV. 408.6 ft MSL
 COORDINATES: N 700221.4 ft ; E 2295355.3 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Dark gray medium-coarse SAND (SP), moist -subrounded-subangular	35			30	
				48	
	40			8	Cement grout
Black sandy SILT (SM), some fine gravel, wet				27	
Gray fine-medium SAND (SP), moist -medium-coarse grained from 47 to 60'	45			18	
				47	
	50			471	2-in. I.D. Stainless Steel casing
				52	
-sand is wet and flowing	55			21	
				233	
-subrounded-subangular, saturated	60			192	6-in. borehole diameter
-occasional clay nodules present					
-fine gravel and coarse sand from 64.5 to 66'	65			121	
-fine gray sand from 66 to 67.5', moist				114	
-coarse gray sand below 67.5', moist					
	70				

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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

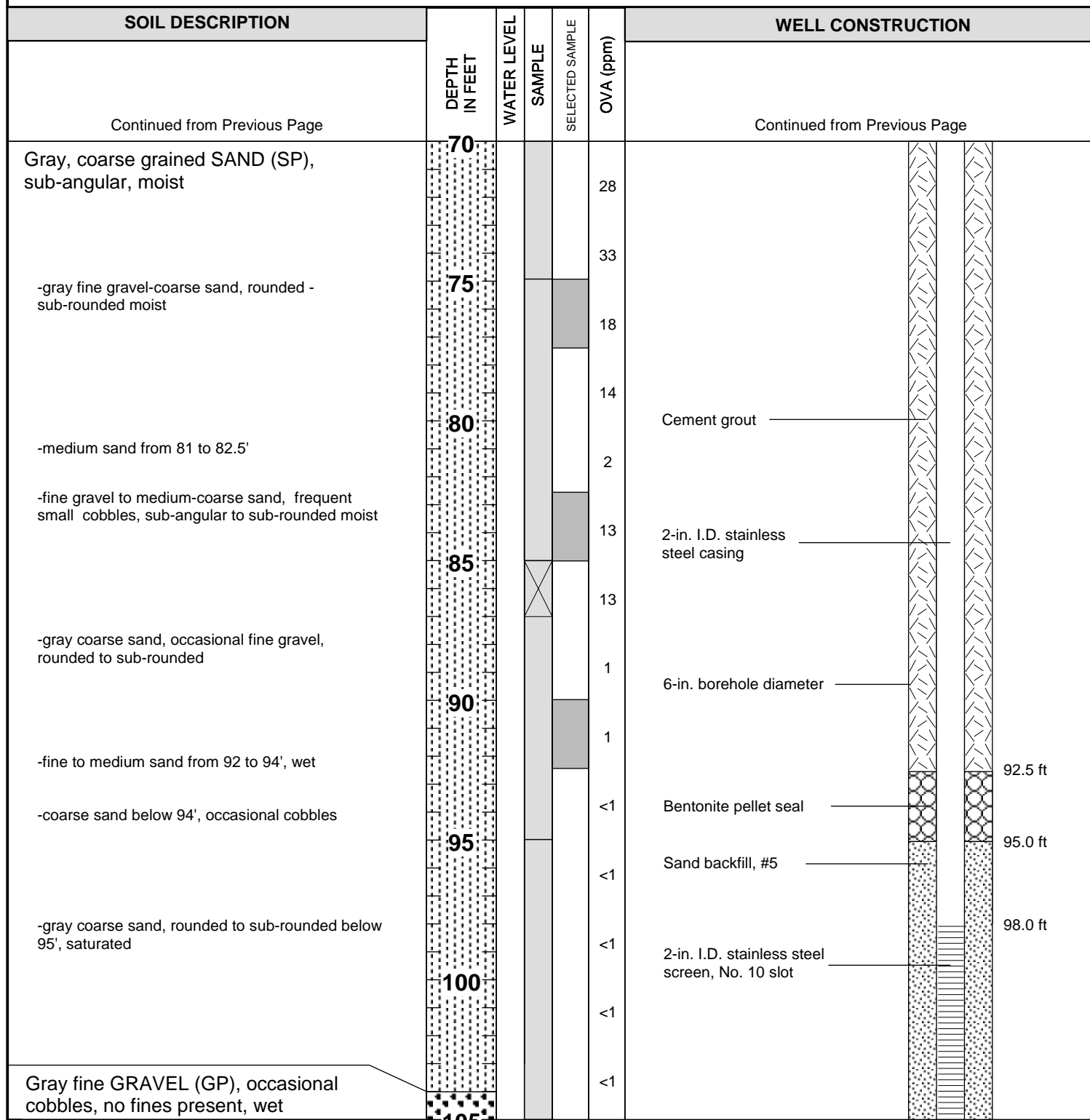
A1-02

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 12, 2004
 GROUND SURFACE ELEV.: 405.5 ft MSL
 TOP OF CASING ELEV. 408.6 ft MSL
 COORDINATES: N 700221.4 ft ; E 2295355.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-02

Sauget Area 1
Sauget and Cahokia, Illinois

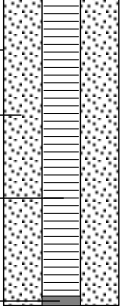
GSI Job No. G-2876

Page 3 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 12, 2004
 GROUND SURFACE ELEV.: 405.5 ft MSL
 TOP OF CASING ELEV. 408.6 ft MSL
 COORDINATES: N 700221.4 ft ; E 2295355.3 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Gray coarse GRAVEL (GP), with small cobbles, wet	105				<1	 <p>6-in. borehole diameter</p> <p>Sand backfill, #5</p> <p>2-in. I.D. stainless steel screen, No. 10 slot</p> <p>Bottom plug</p> <p>113 ft</p>
Limestone bedrock	110					
Total Depth = 113 ft	115					
	120					
	125					
	130					
	135					
	140					

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.
- 3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

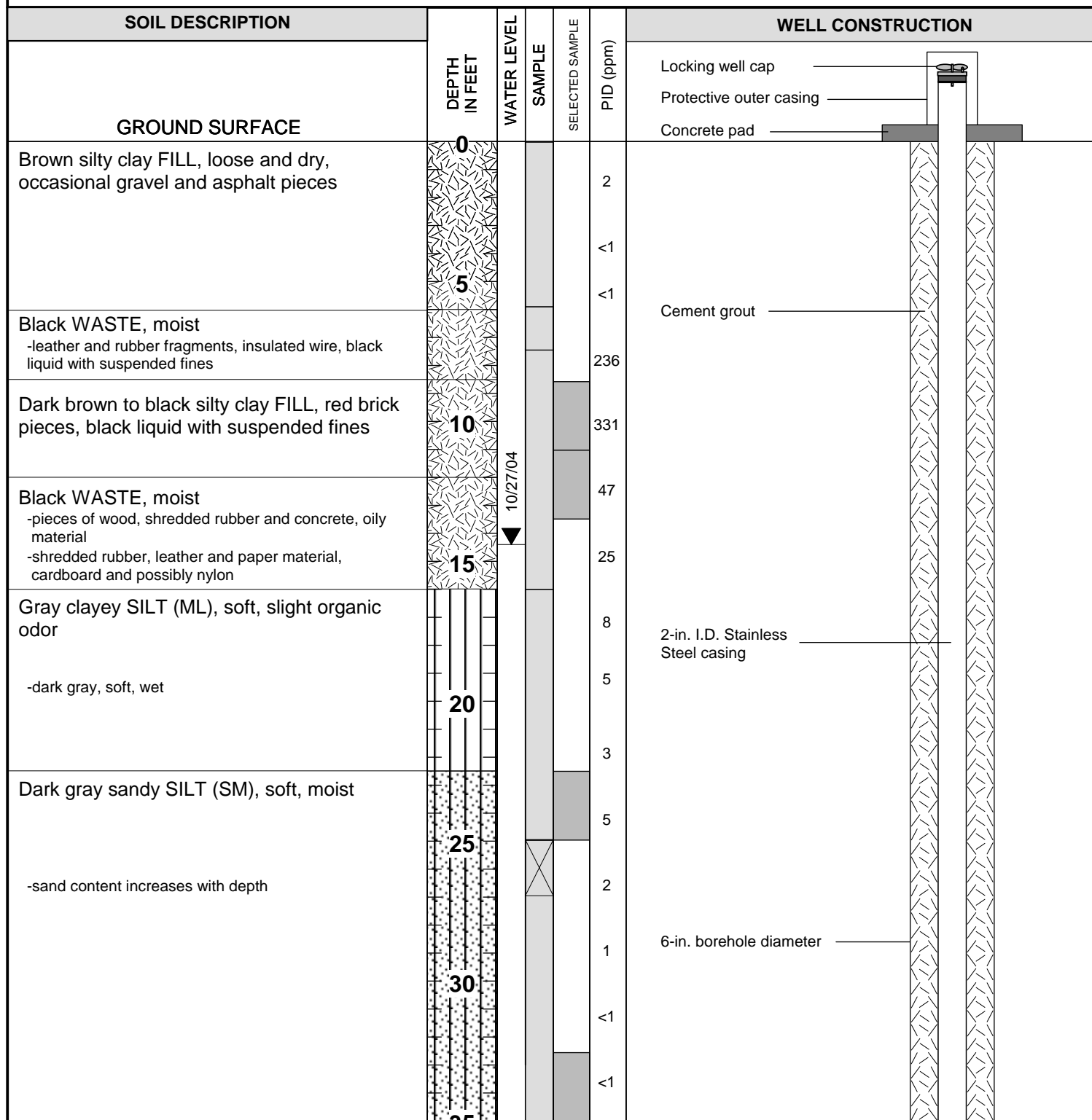
A1-02

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 10, 2004
 GROUND SURFACE ELEV.: 409.7 ft MSL
 TOP OF CASING ELEV.: 412.57 ft MSL
 COORDINATES: N 700049.7 ft ; E 2295611.1 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-03

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 10, 2004
 GROUND SURFACE ELEV.: 409.7 ft MSL
 TOP OF CASING ELEV.: 412.57 ft MSL
 COORDINATES: N 700049.7 ft ; E 2295611.1 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Gray medium-coarse SAND (SP), moist -angular - sub-angular -clay nodules present from 35 to 36'	35				<1	
					<1	
	40				<1	Cement grout
					1	
	45				1	
					2	
	50				1	2-in. I.D. Stainless Steel casing
					1	
	55				<1	
-medium to coarse sand, some fines, sub-angular - sub-rounded, moist					<1	
	60				1	6-in. borehole diameter
-clay nodules present from 63 to 65'					<1	
	65				<1	
-medium- fine sand, small gravel present, sub-rounded to sub-angular, becoming more coarse with depth, wet					<1	
	70					

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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

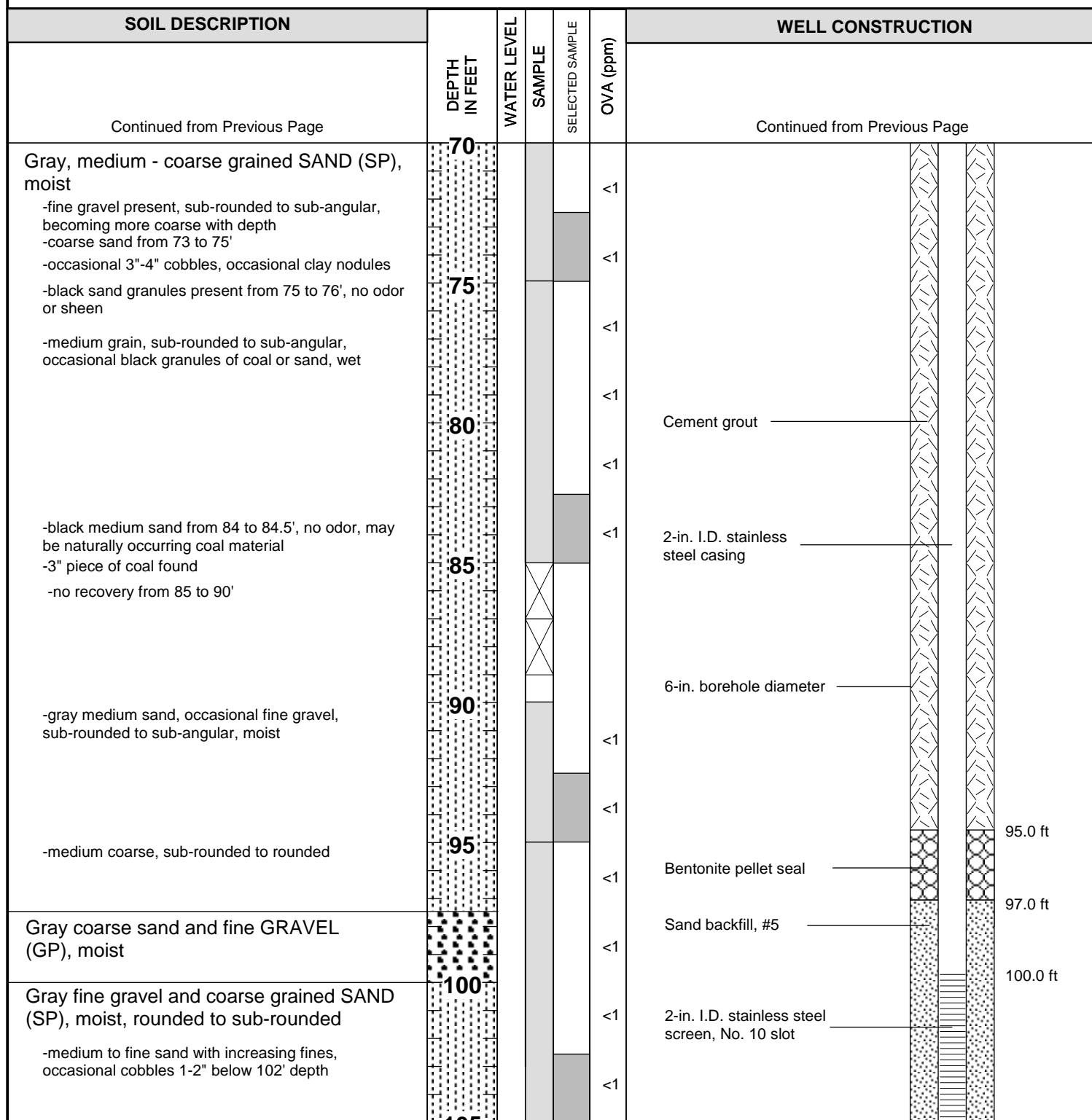
A1-03

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 10, 2004
 GROUND SURFACE ELEV.: 409.7 ft MSL
 TOP OF CASING ELEV.: 412.57 ft MSL
 COORDINATES: N 700049.7 ft ; E 2295611.1 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-03

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876

Page 3 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 10, 2004
 GROUND SURFACE ELEV.: 409.7 ft MSL
 TOP OF CASING ELEV.: 412.57 ft MSL
 COORDINATES: N 700049.7 ft ; E 2295611.1 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
-poor core recovery due to drilling difficulties. Recovered material included pulverized bedrock, sand, and gravel. Bedrock surface is somewhere within the 105 to 110 ft depth interval.	105				<1 4	6-in. borehole diameter
Limestone bedrock	110					Sand backfill, #5
	115					2-in. I.D. stainless steel screen, No. 10 slot
Total Depth = 115 ft						Bottom plug
	120					
	125					
	130					
	135					
	140					

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.
- 3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-03

Sauget Area 1
Sauget and Cahokia, Illinois

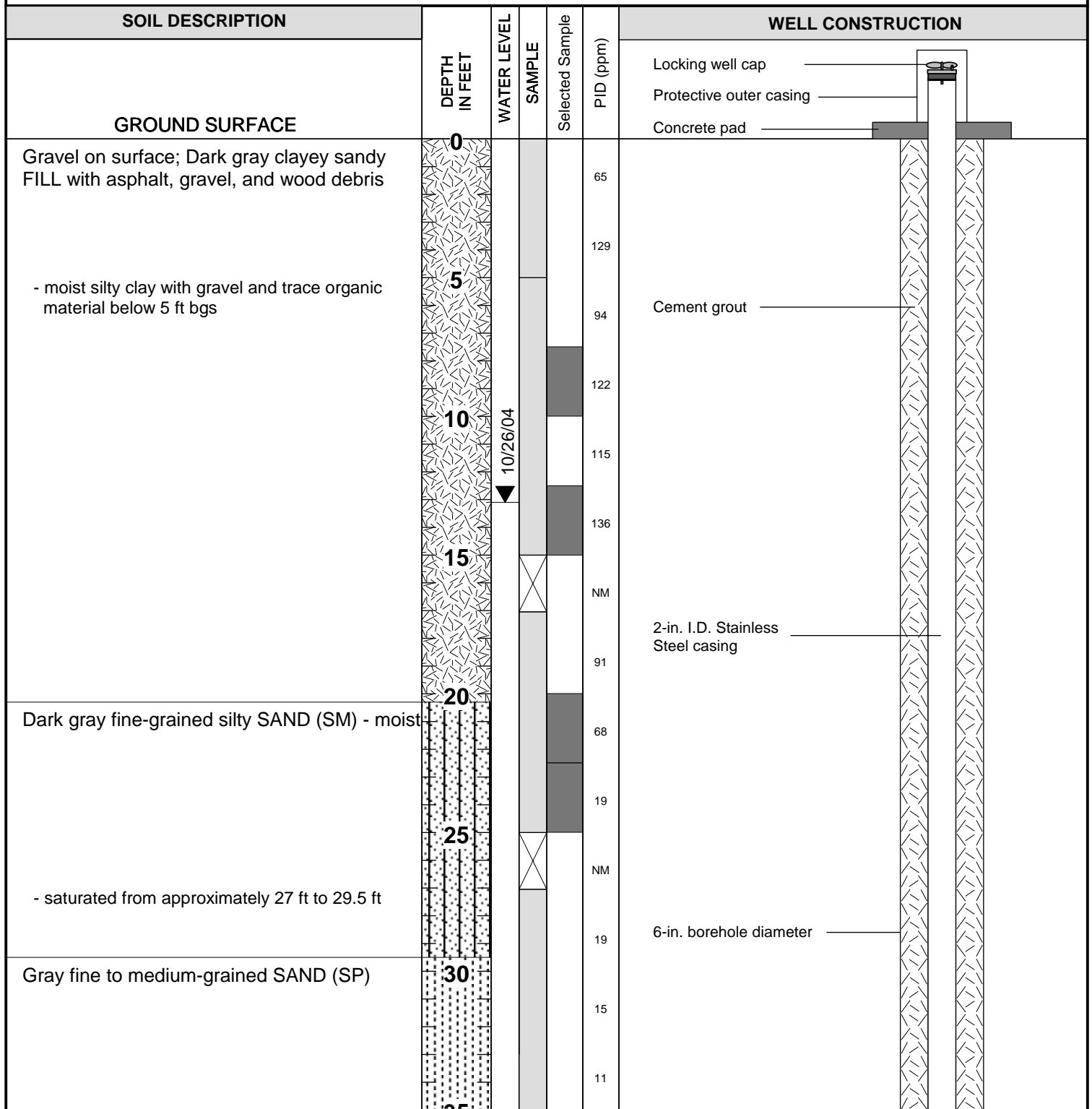
GSI Job No. G-2876

Page 4 of 4

Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 26, 2004
 GROUND SURFACE ELEV: 407.8 ft, MSL
 TOP OF CASING ELEV: 410.87 ft, MSL
 WELL COORDINATES: N 699614.9 ft E 2295082.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

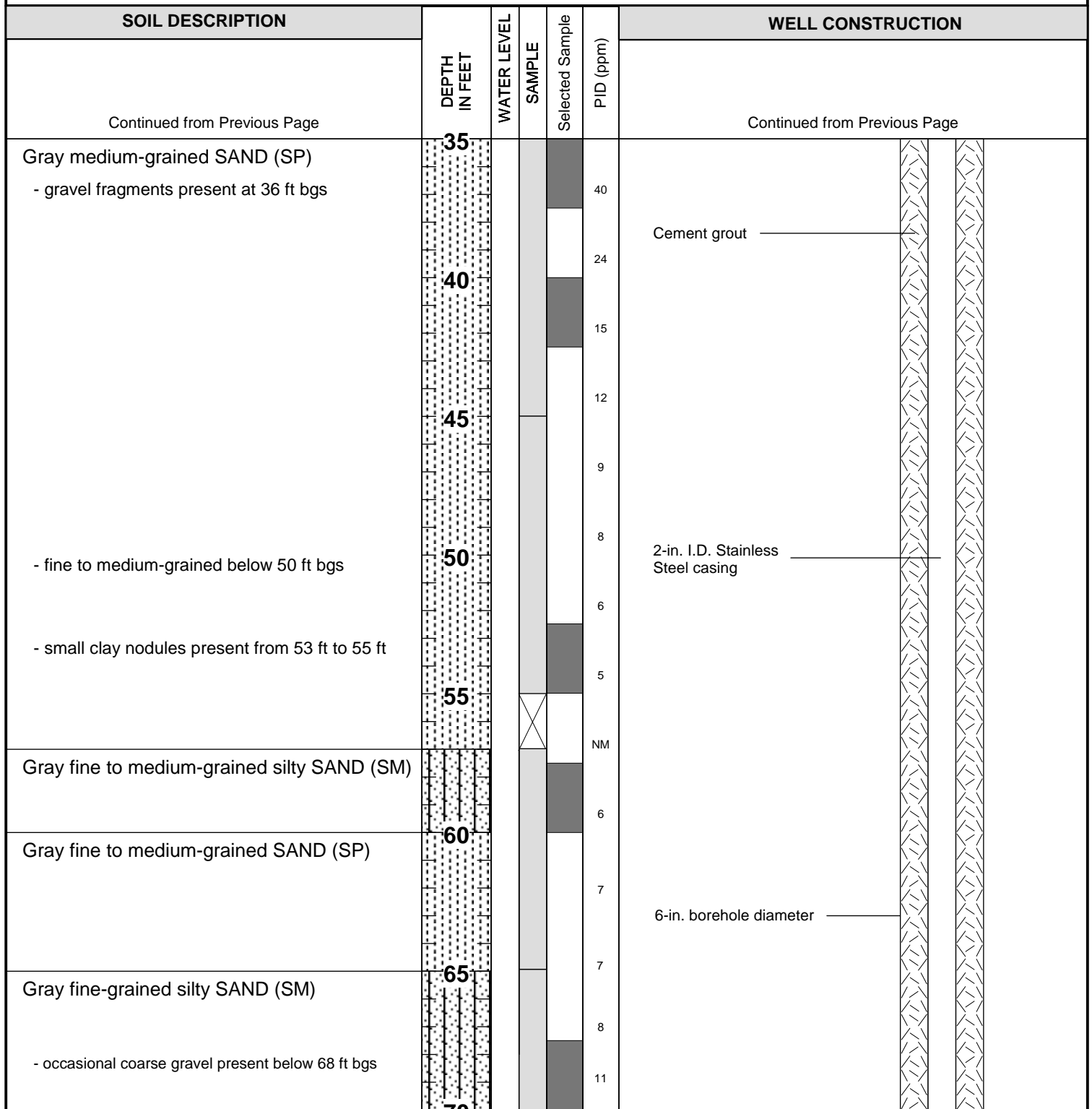
A1-4

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 26, 2004
 GROUND SURFACE ELEV: 407.8 ft, MSL
 TOP OF CASING ELEV: 410.87 ft, MSL
 WELL COORDINATES: N 699614.9 ft E 2295082.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

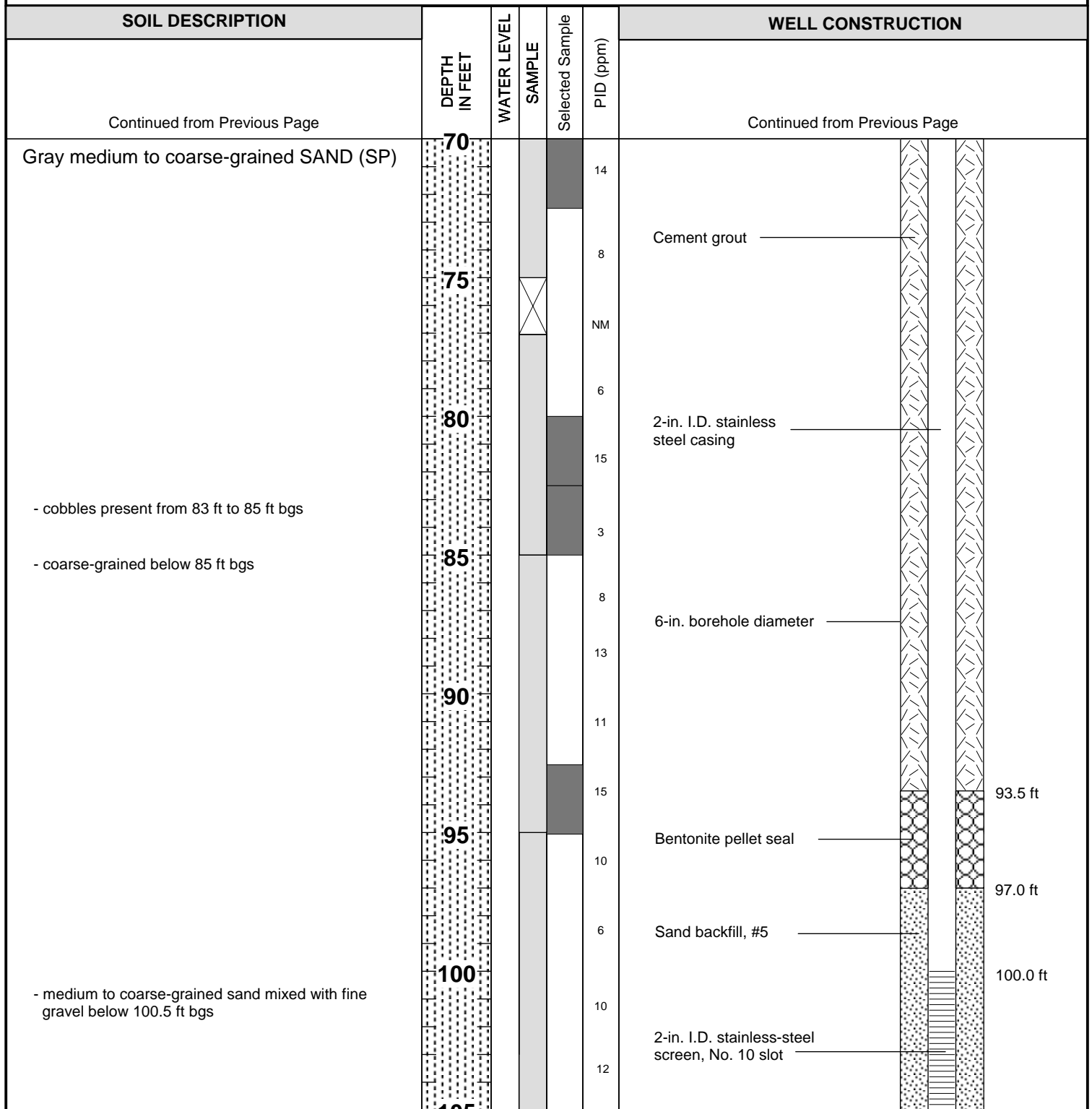
A1-4

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 26, 2004
 GROUND SURFACE ELEV: 407.8 ft, MSL
 TOP OF CASING ELEV: 410.87 ft, MSL
 WELL COORDINATES: N 699614.9 ft E 2295082.7 ft



Continued on Next Page



LOG & AS-BUILT DIAGRAM

A1-4

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 26, 2004
 GROUND SURFACE ELEV: 407.8 ft, MSL
 TOP OF CASING ELEV: 410.87 ft, MSL
 WELL COORDINATES: N 699614.9 ft E 2295082.7 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	Selected Sample	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Coarse subrounded GRAVEL (GW) mixed with gray medium-grained sand	105				12	2-in. I.D. stainless-steel screen, No. 10 slot
					10	Sand backfill, #5
Limestone Bedrock	110				NM	6-in. borehole diameter
Total Depth = 115.0 ft	115					Bottom plug
	120					
	125					
	130					
	135					
	140					

Notes:
 1) Location coordinates are Illinois West Zone State Plane (NAD 83) in feet. Elevations are referenced to NAVD 88.
 2) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



LOG & AS-BUILT DIAGRAM

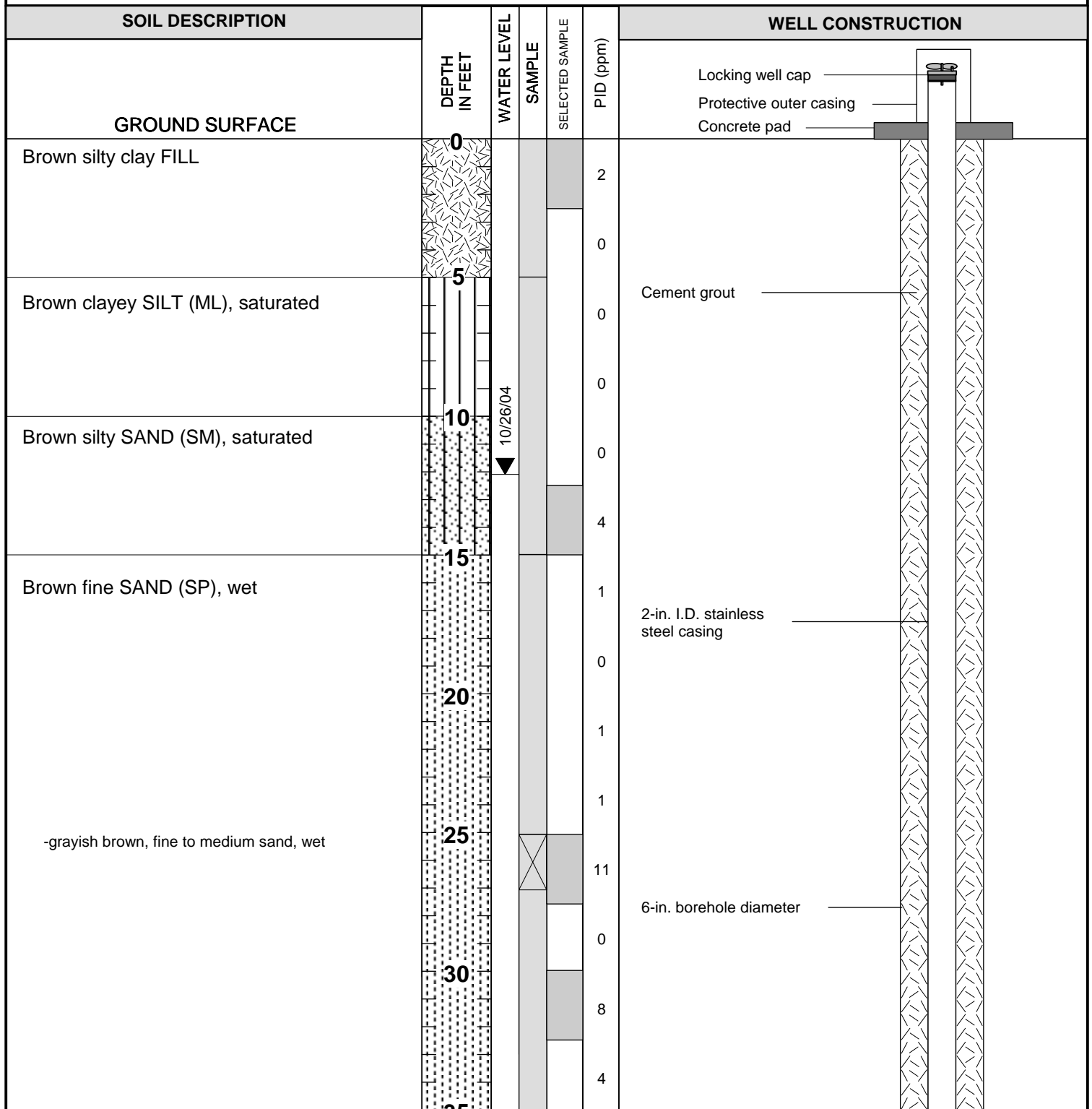
A1-4

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 8, 2004
 GROUND SURFACE ELEV.: 406.5 ft MSL
 TOP OF CASING ELEV.: 409.74 ft MSL
 COORDINATES: N 699948.4 ft ; E 2295067.8 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.


LOG & AS-BUILT DIAGRAM

A1-5

Sauget Area 1
 Sauget and Cahokia, Illinois

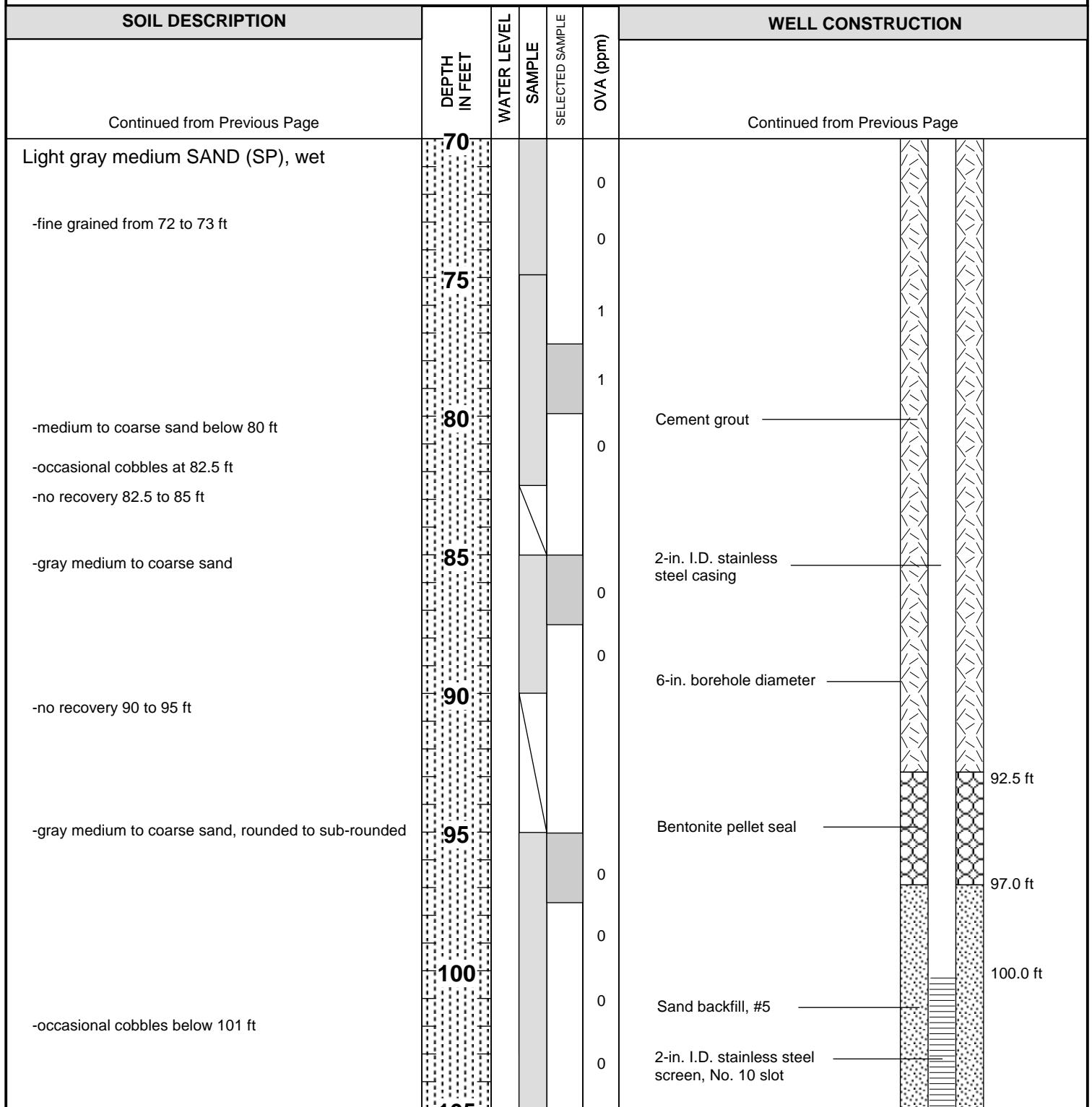
GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

COMPLETION DATE: October 8, 2004
GROUND SURFACE ELEV.: 406.5 ft MSL
TOP OF CASING ELEV.: 409.74 ft MSL
COORDINATES: N 699948.4 ft ; E 2295067.8 ft

 <p>GROUNDWATER SERVICES, INC.</p>	<p align="center">LOG & AS-BUILT DIAGRAM</p> <p align="center">A1-5</p>	<p>GSI Job No. G-2876</p> <p>Page 2 of 4</p> <p>Issued: 1/21/05</p>
	<p align="center">Sauget Area 1 Sauget and Cahokia, Illinois</p>	

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 8, 2004
 GROUND SURFACE ELEV.: 406.5 ft MSL
 TOP OF CASING ELEV.: 409.74 ft MSL
 COORDINATES: N 699948.4 ft ; E 2295067.8 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

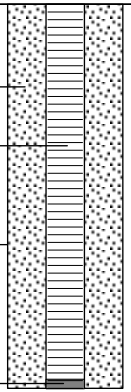
A1-5

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Geral Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 8, 2004
 GROUND SURFACE ELEV.: 406.5 ft MSL
 TOP OF CASING ELEV.: 409.74 ft MSL
 COORDINATES: N 699948.4 ft ; E 2295067.8 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Gray medium coarse SAND (SP), rounded to sub-rounded, with occasional cobbles, wet	105				0	 <p>Sand backfill, #5</p> <p>2-in. I.D. stainless steel screen, No. 10 slot</p> <p>6-in. borehole diameter</p> <p>Bottom plug</p> <p>115.0 ft</p>
Limestone bedrock	110				0	
Total Depth = 115.0 ft	115					
	120					
	125					
	130					
	135					
	140					

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

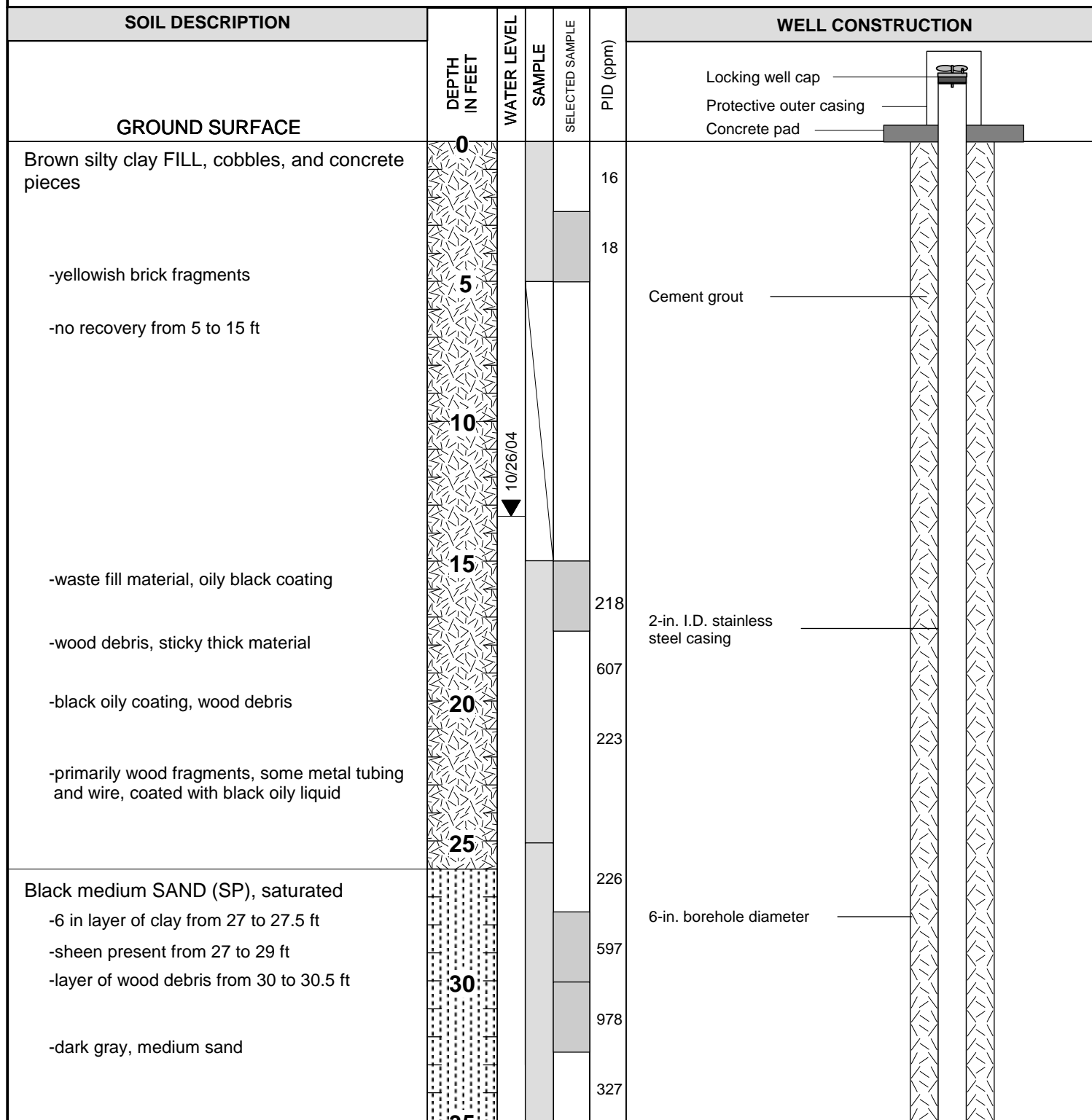
A1-5

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 24 ft bgs)

COMPLETION DATE: October 6, 2004
 GROUND SURFACE ELEV.: 408.9 ft MSL
 TOP OF CASING ELEV.: 410.97 ft MSL
 COORDINATES: N 700550.4 ft ; E 2295404.5 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

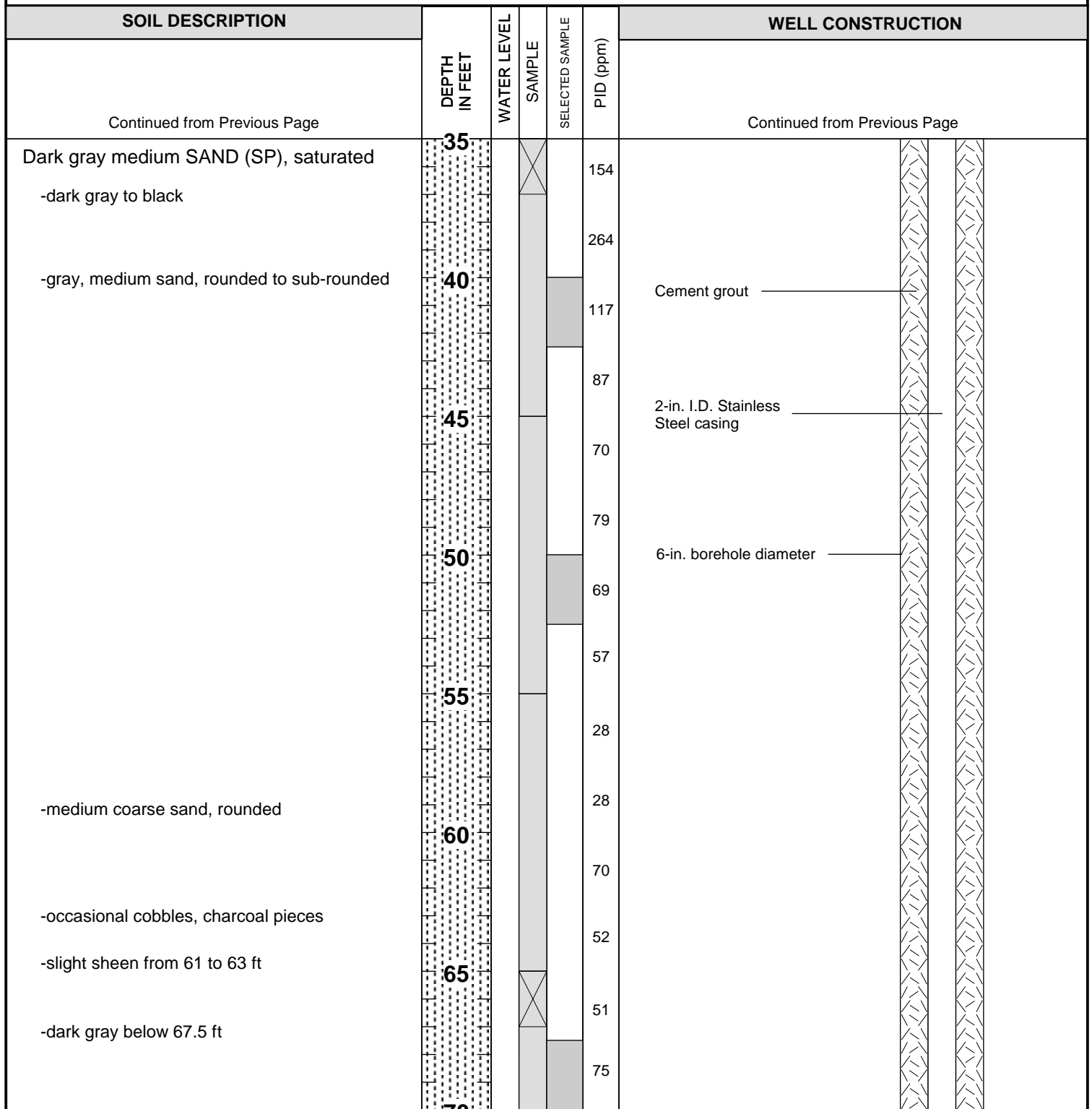
A1-6

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 6, 2004
 GROUND SURFACE ELEV.: 408.9 ft MSL
 TOP OF CASING ELEV.: 410.97 ft MSL
 COORDINATES: N 700550.4 ft ; E 2295404.5 ft



Continued on Next Page

LOG & AS-BUILT DIAGRAM

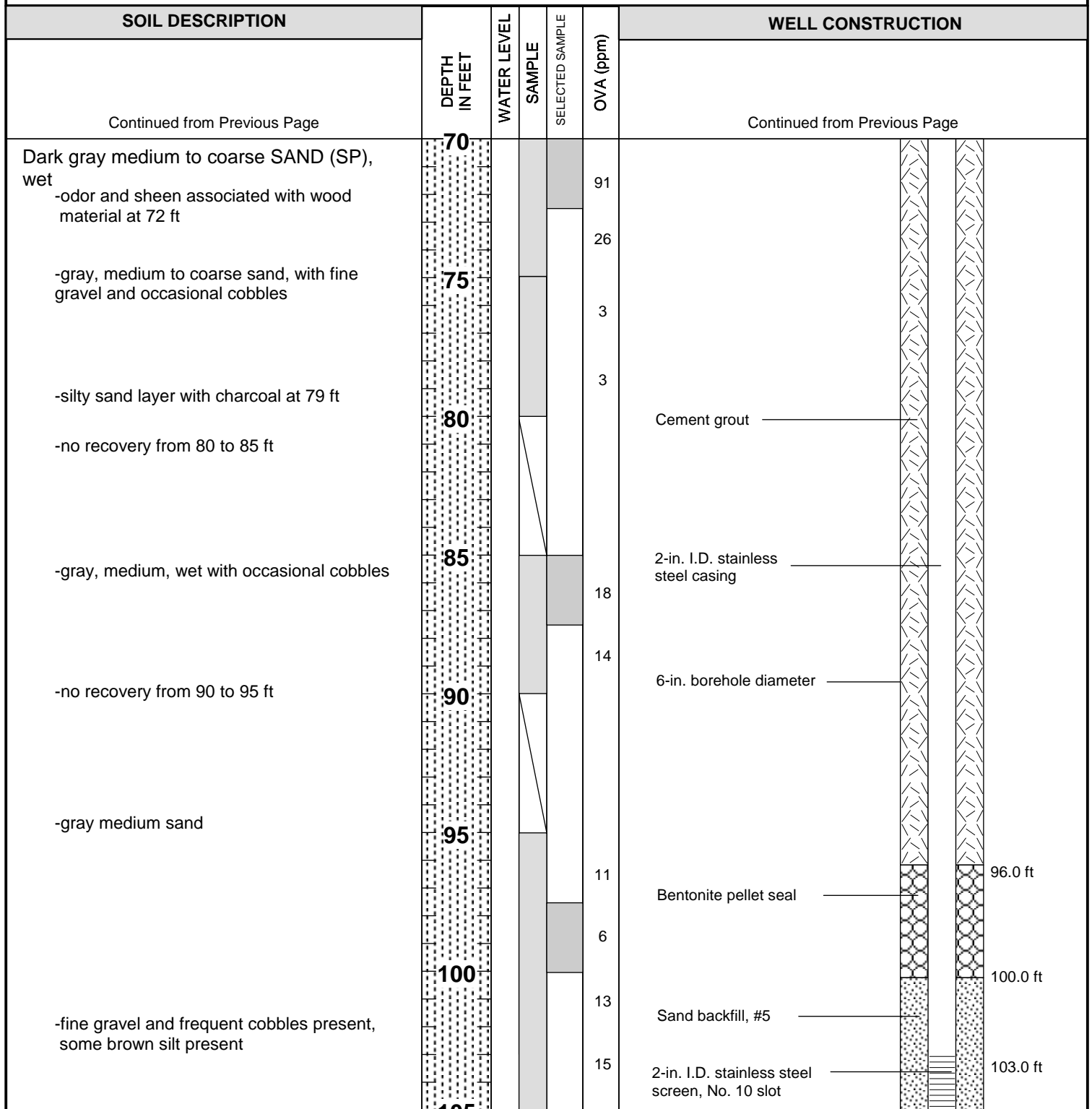
A1-6

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 6, 2004
 GROUND SURFACE ELEV.: 408.9 ft MSL
 TOP OF CASING ELEV.: 410.97 ft MSL
 COORDINATES: N 700550.4 ft ; E 2295404.5 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

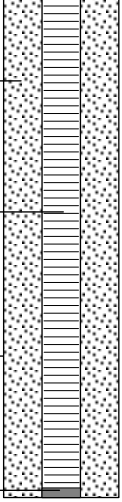
A1-6

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 6, 2004
 GROUND SURFACE ELEV.: 408.9 ft MSL
 TOP OF CASING ELEV.: 410.97 ft MSL
 COORDINATES: N 700550.4 ft ; E 2295404.5 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Gray medium SAND (SP), mixed with gravel and cobbles	105				13	 <p>Sand backfill, #5</p> <p>2-in. I.D. stainless steel screen, No. 10 slot</p> <p>6-in. borehole diameter</p> <p>Bottom plug 118.0 ft</p>
Light gray limestone bedrock	110				11	
	115					
Total Depth = 118 ft	120					
	125					
	130					
	135					
	140					

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.
- 3) A temporary 7-inch over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

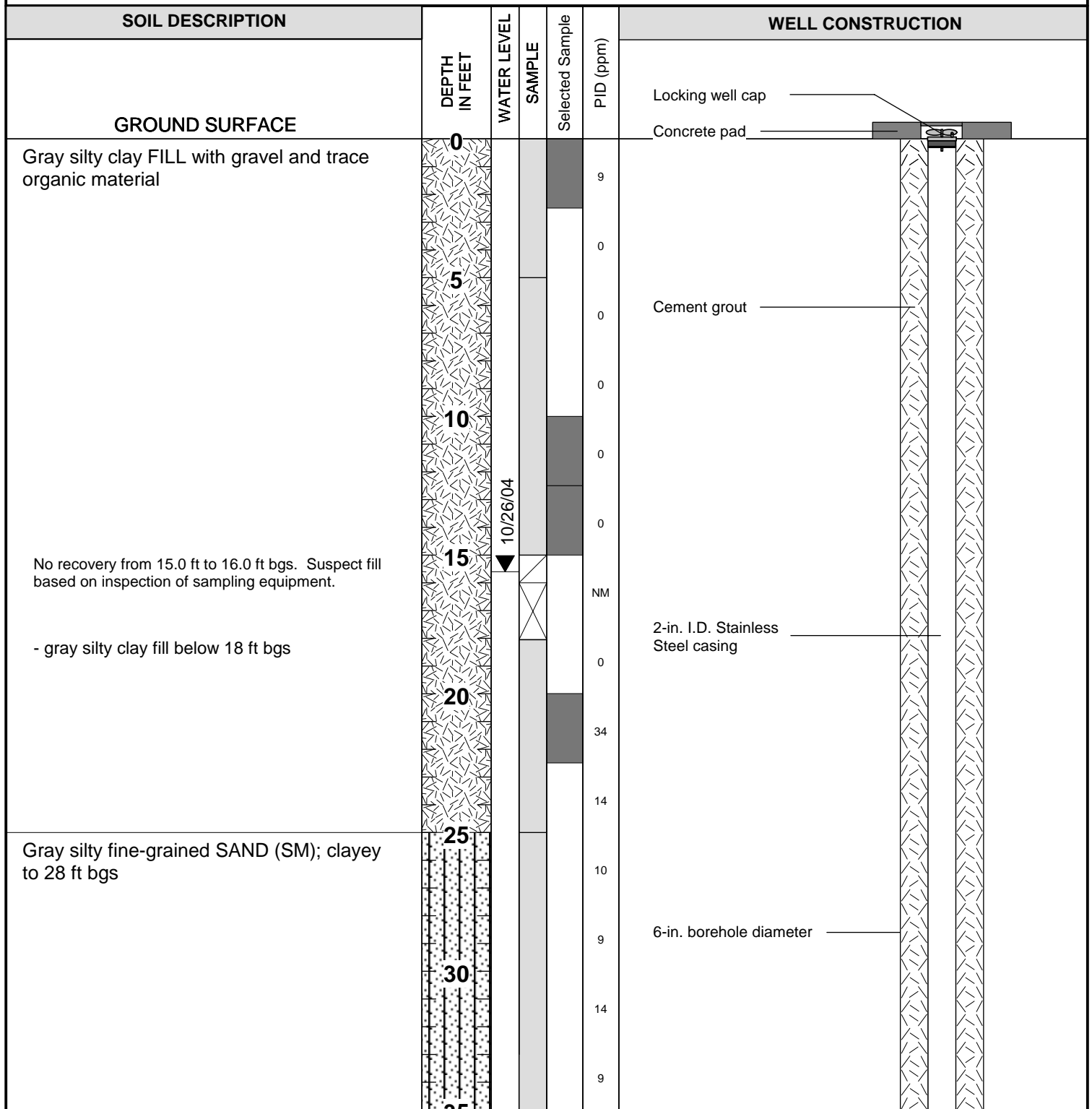
A1-6

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 27, 2004
 GROUND SURFACE ELEV: 410.9 ft, MSL
 TOP OF CASING ELEV: 410.59 ft, MSL
 WELL COORDINATES: N 700568.5 ft E 2295656.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

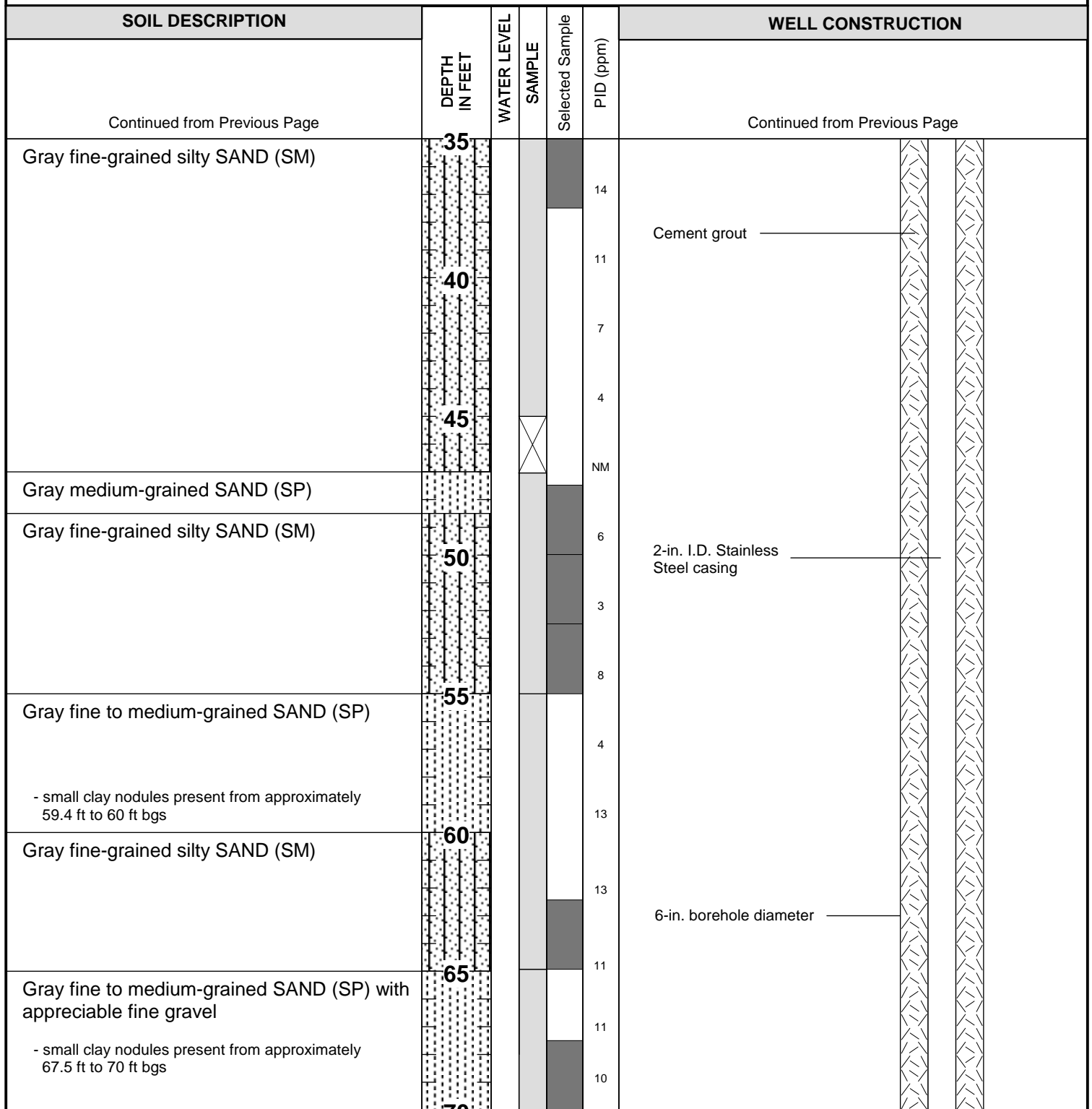
A1-7

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 27, 2004
 GROUND SURFACE ELEV: 410.9 ft, MSL
 TOP OF CASING ELEV: 410.59 ft, MSL
 WELL COORDINATES: N 700568.5 ft E 2295656.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

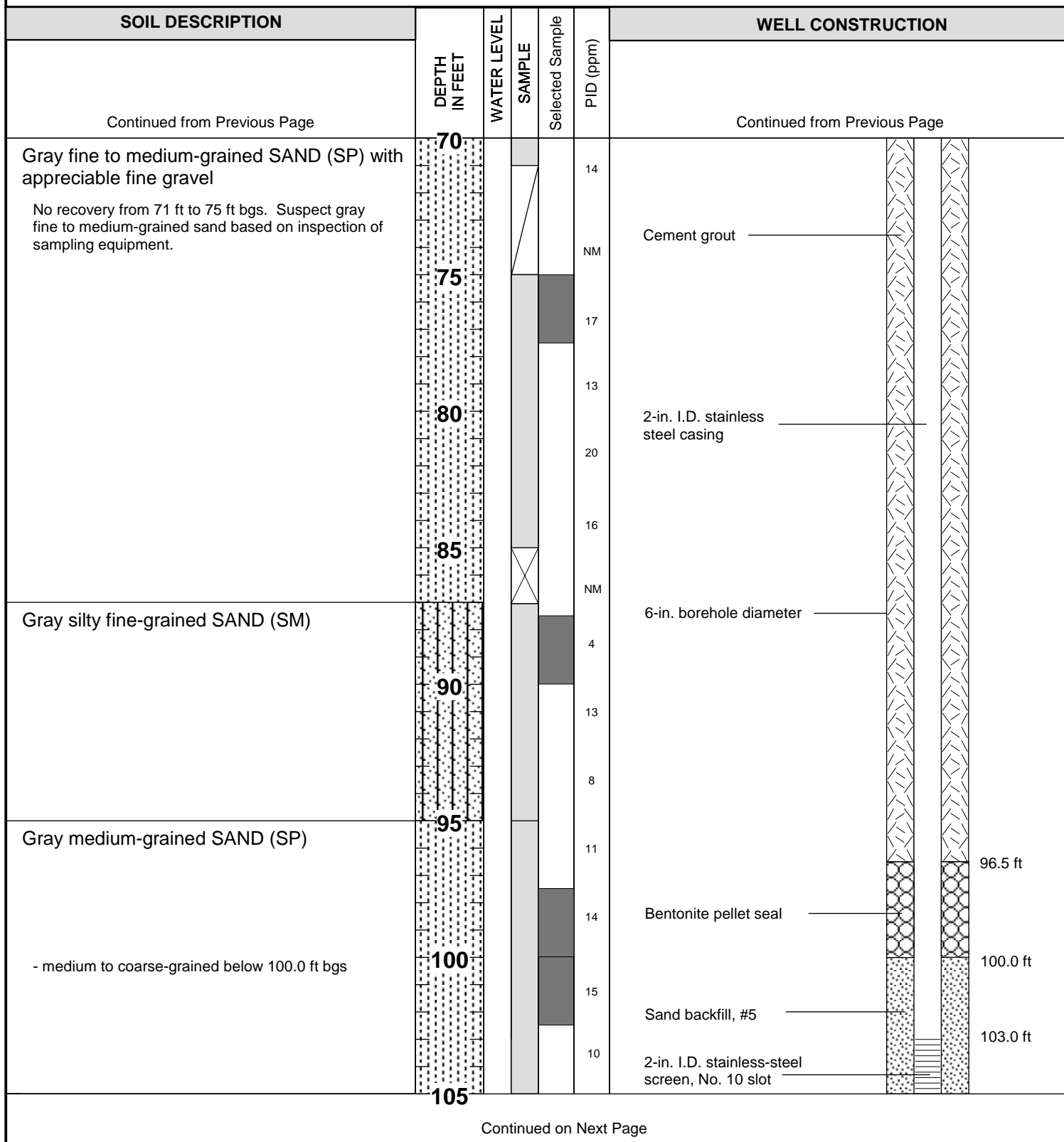
A1-7

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 27, 2004
 GROUND SURFACE ELEV: 410.9 ft, MSL
 TOP OF CASING ELEV: 410.59 ft, MSL
 WELL COORDINATES: N 700568.5 ft E 2295656.3 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-7

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 27, 2004
 GROUND SURFACE ELEV: 410.9 ft, MSL
 TOP OF CASING ELEV: 410.59 ft, MSL
 WELL COORDINATES: N 700568.5 ft E 2295656.3 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE Selected Sample	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Fine to coarse rounded to subrounded GRAVEL (GP) mixed with medium-grained sand and cobbles	105			10	2-in. I.D. stainless-steel screen, No. 10 slot
	110			8	Sand backfill, #5
Limestone Bedrock	115			NM	6-in. borehole diameter
Total Depth = 118.0 ft					Bottom plug 118.0 ft
	120				
	125				
	130				
	135				
	140				

Notes:
 1) Location coordinates are Illinois West Zone State Plane (NAD 83) in feet. Elevations are referenced to NAVD 88.
 2) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



LOG & AS-BUILT DIAGRAM

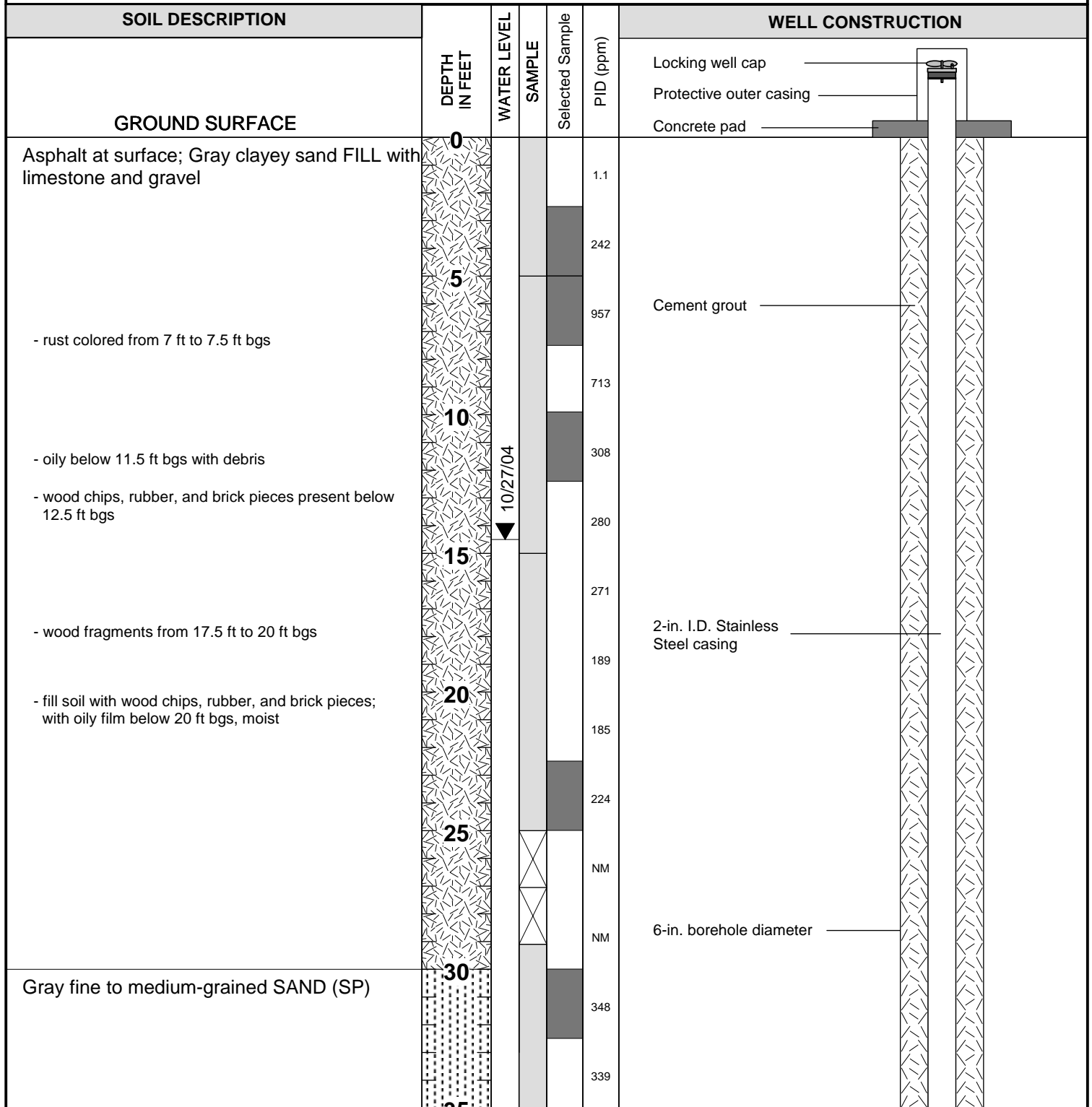
A1-7

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 35 ft bgs)

COMPLETION DATE: September 23, 2004
 GROUND SURFACE ELEV: 409.1 ft, MSL
 TOP OF CASING ELEV: 411.83 ft, MSL
 WELL COORDINATES: N 700713.7 ft E 2295388.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

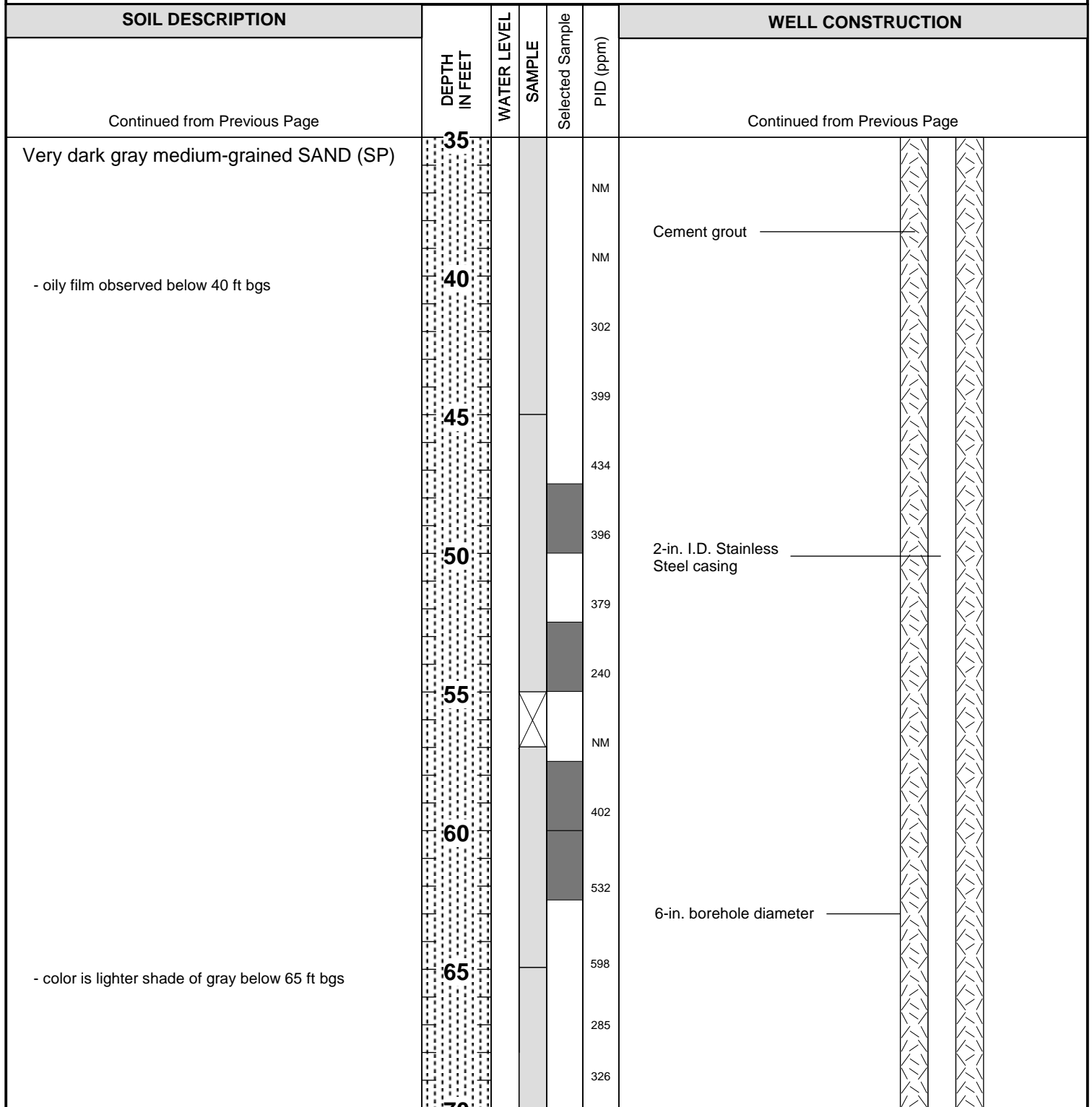
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Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 23, 2004
 GROUND SURFACE ELEV: 409.1 ft, MSL
 TOP OF CASING ELEV: 411.83 ft, MSL
 WELL COORDINATES: N 700713.7 ft E 2295388.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

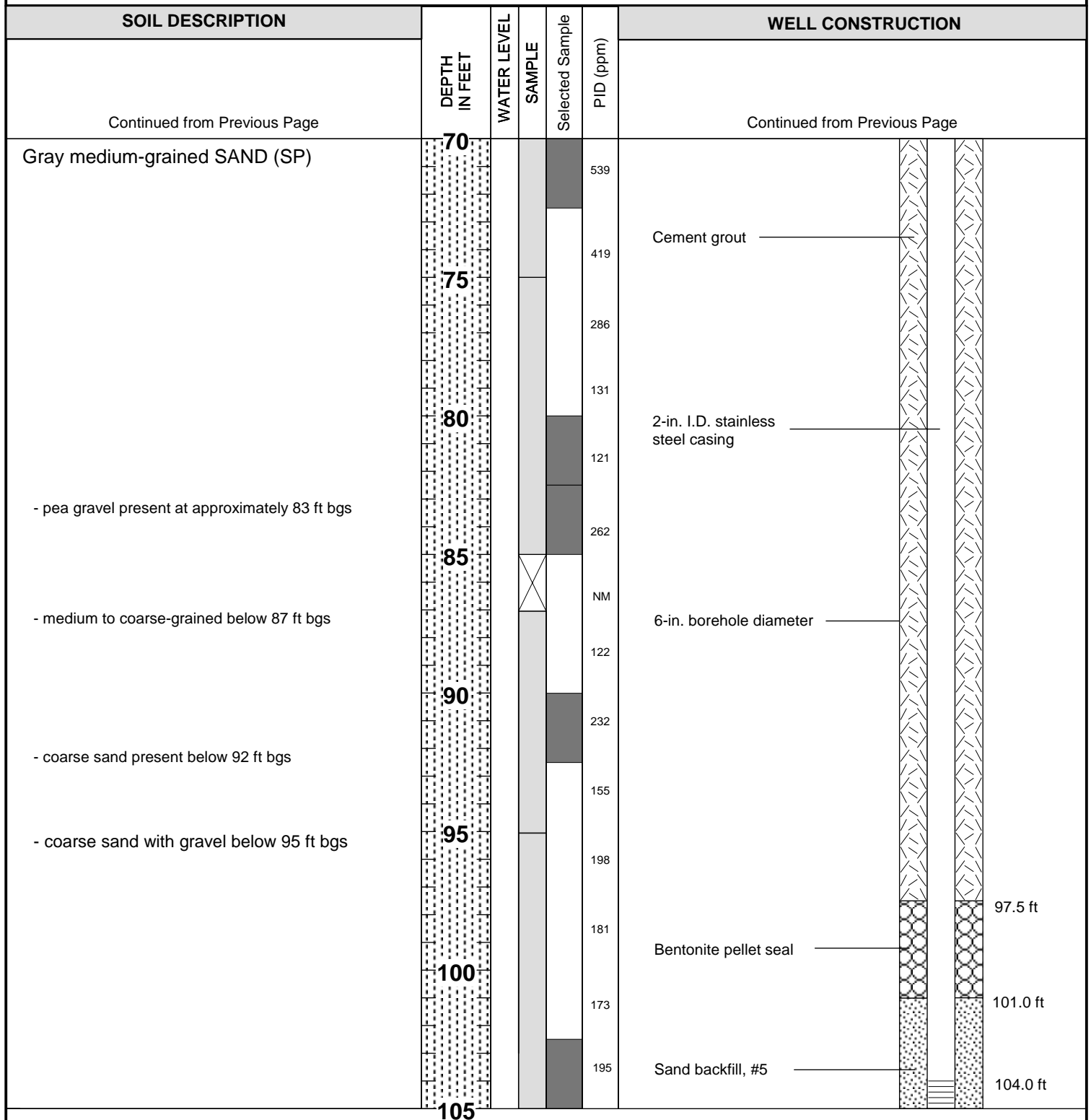
A1-8

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 23, 2004
 GROUND SURFACE ELEV: 409.1 ft, MSL
 TOP OF CASING ELEV: 411.83 ft, MSL
 WELL COORDINATES: N 700713.7 ft E 2295388.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

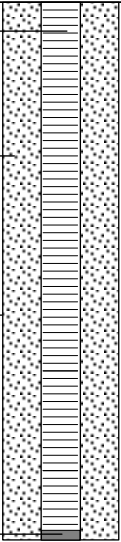
A1-8

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 23, 2004
 GROUND SURFACE ELEV: 409.1 ft, MSL
 TOP OF CASING ELEV: 411.83 ft, MSL
 WELL COORDINATES: N 700713.7 ft E 2295388.7 ft

SOIL DESCRIPTION		DEPTH IN FEET	WATER LEVEL	SAMPLE	Selected Sample	PID (ppm)	WELL CONSTRUCTION	
Continued from Previous Page							Continued from Previous Page	
Gray medium to coarse rounded GRAVEL (GW) with coarse-grained sand and occasional cobble fragments	105					61	2-in. I.D. stainless-steel screen, No. 10 slot	
	110					67	Sand backfill, #5	
Limestone Bedrock	115					118	6-in. borehole diameter	
							Bottom plug	
Total Depth = 119.0 ft		120						
		125						
		130						
		135						
		140						

Notes:

1) Location coordinates are Illinois West Zone State Plane (NAD 83) in feet. Elevations are referenced to NAVD 88.

2) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.

Notes:
 1) Location coordinates are Illinois West Zone State Plane (NAD 83) in feet. Elevations are referenced to NAVD 88.
 2) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



LOG & AS-BUILT DIAGRAM

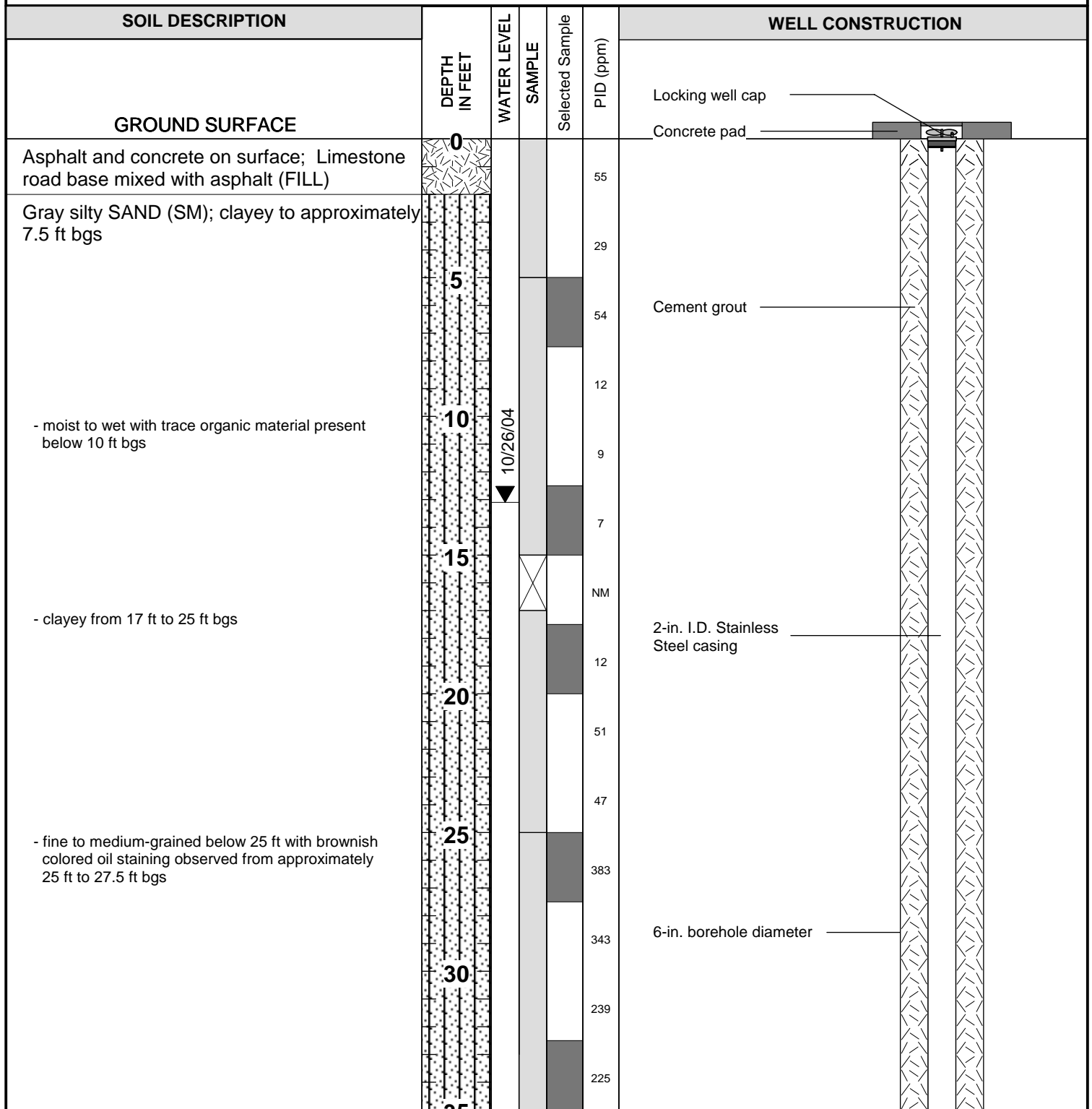
A1-8

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 29, 2004
 GROUND SURFACE ELEV: 407.7 ft, MSL
 TOP OF CASING ELEV: 407.36 ft, MSL
 WELL COORDINATES: N 700791.6 ft E 2295167.1 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

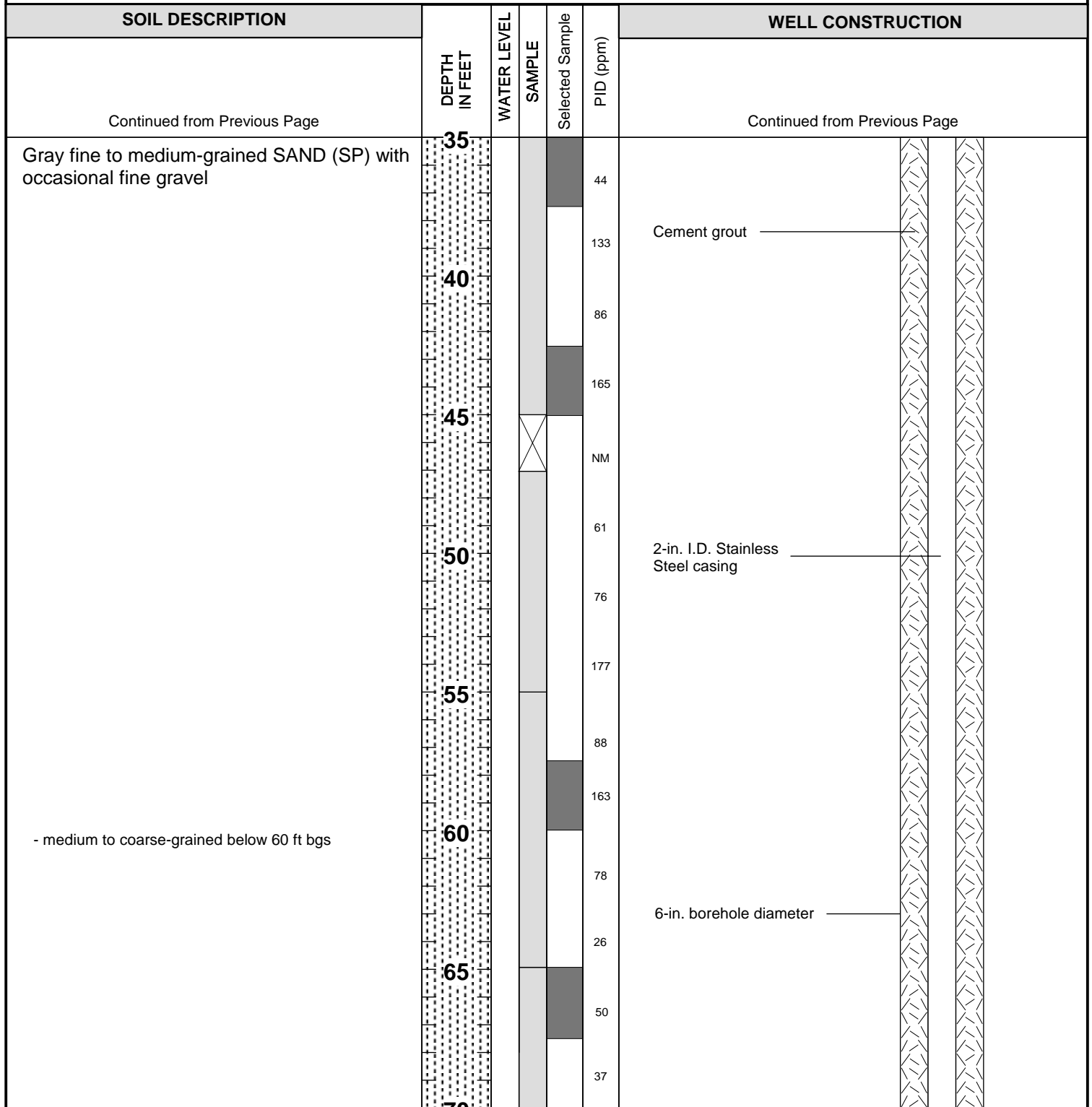
A1-9

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 29, 2004
 GROUND SURFACE ELEV: 407.7 ft, MSL
 TOP OF CASING ELEV: 407.36 ft, MSL
 WELL COORDINATES: N 700791.6 ft E 2295167.1 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-9

Sauget Area 1
 Sauget and Cahokia, Illinois

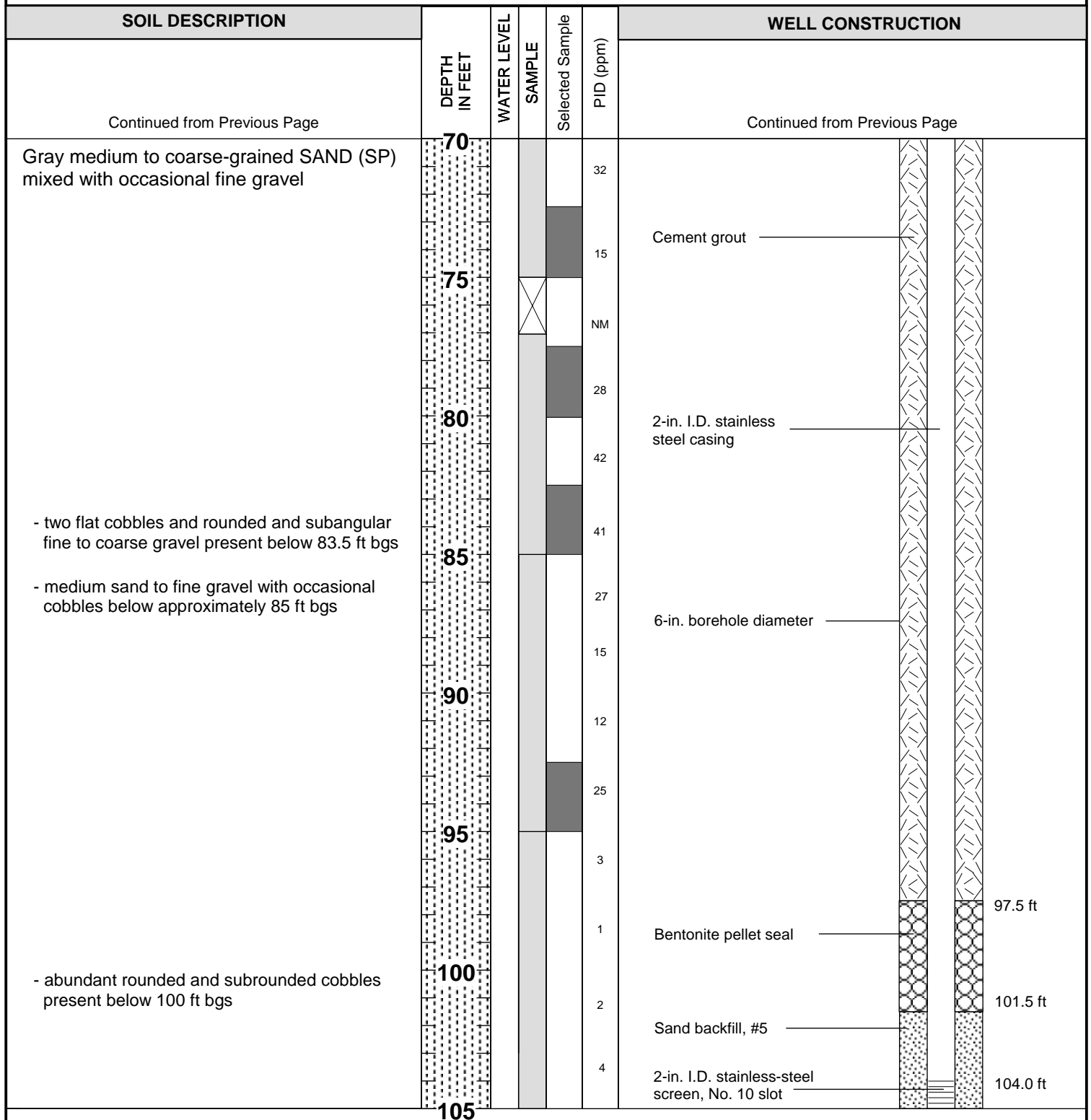
GSI Job No. G-2876

Page 2 of 4

Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 29, 2004
 GROUND SURFACE ELEV: 407.7 ft, MSL
 TOP OF CASING ELEV: 407.36 ft, MSL
 WELL COORDINATES: N 700791.6 ft E 2295167.1 ft



Continued on Next Page

LOG & AS-BUILT DIAGRAM

A1-9

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
DRILLER: Gerald Sealey (Prosonic Corporation)
DRILLING METHOD: Rotosonic
HOLE DIAMETER: 6 inch

COMPLETION DATE: September 29, 2004
GROUND SURFACE ELEV: 407.7 ft, MSL
TOP OF CASING ELEV: 407.36 ft, MSL
WELL COORDINATES: N 700791.6 ft E 2295167.1 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE Selected Sample	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Coarse GRAVEL (GP) mixed with fine gravel and flat rounded cobbles	105			6	2-in. I.D. stainless-steel screen, No. 10 slot
- reddish with sand, weathered clay, and two 5-inch diameter cobbles from 110 ft to 111 ft bgs	110			4	Sand backfill, #5
Limestone Bedrock	115			NM	6-in. borehole diameter
Total Depth = 119.0 ft	120				Bottom plug 119.0 ft
	125				
	130				
	135				
	140				

Note:
Location coordinates are Illinois West Zone State Plane (NAD 83) in feet. Elevations are referenced to NAVD 88.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

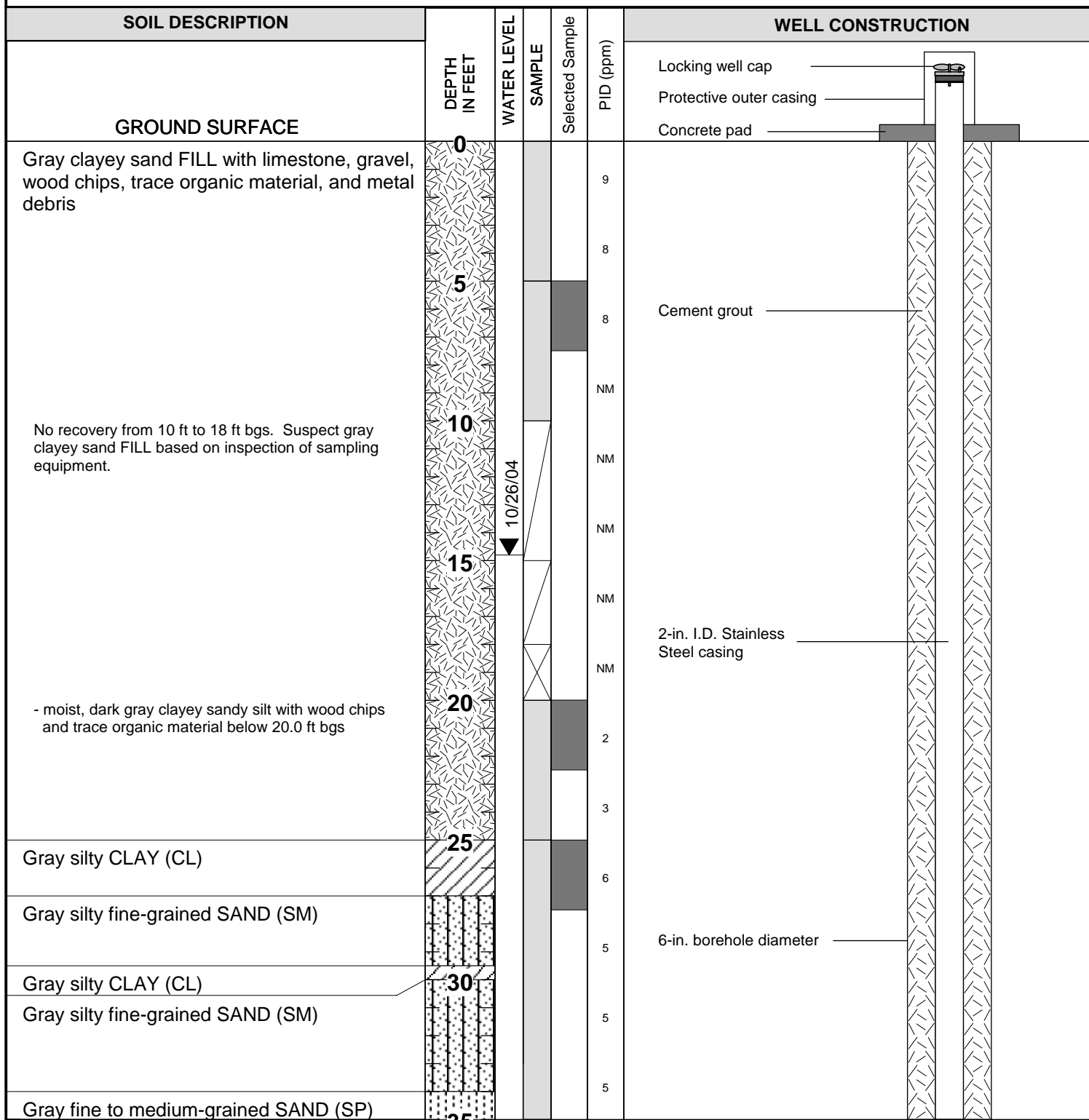
A1-9

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
Page 4 of 4
Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 28, 2004
 GROUND SURFACE ELEV: 409.4 ft, MSL
 TOP OF CASING ELEV: 412.35 ft, MSL
 WELL COORDINATES: N 701175.6 ft E 2295675.0 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

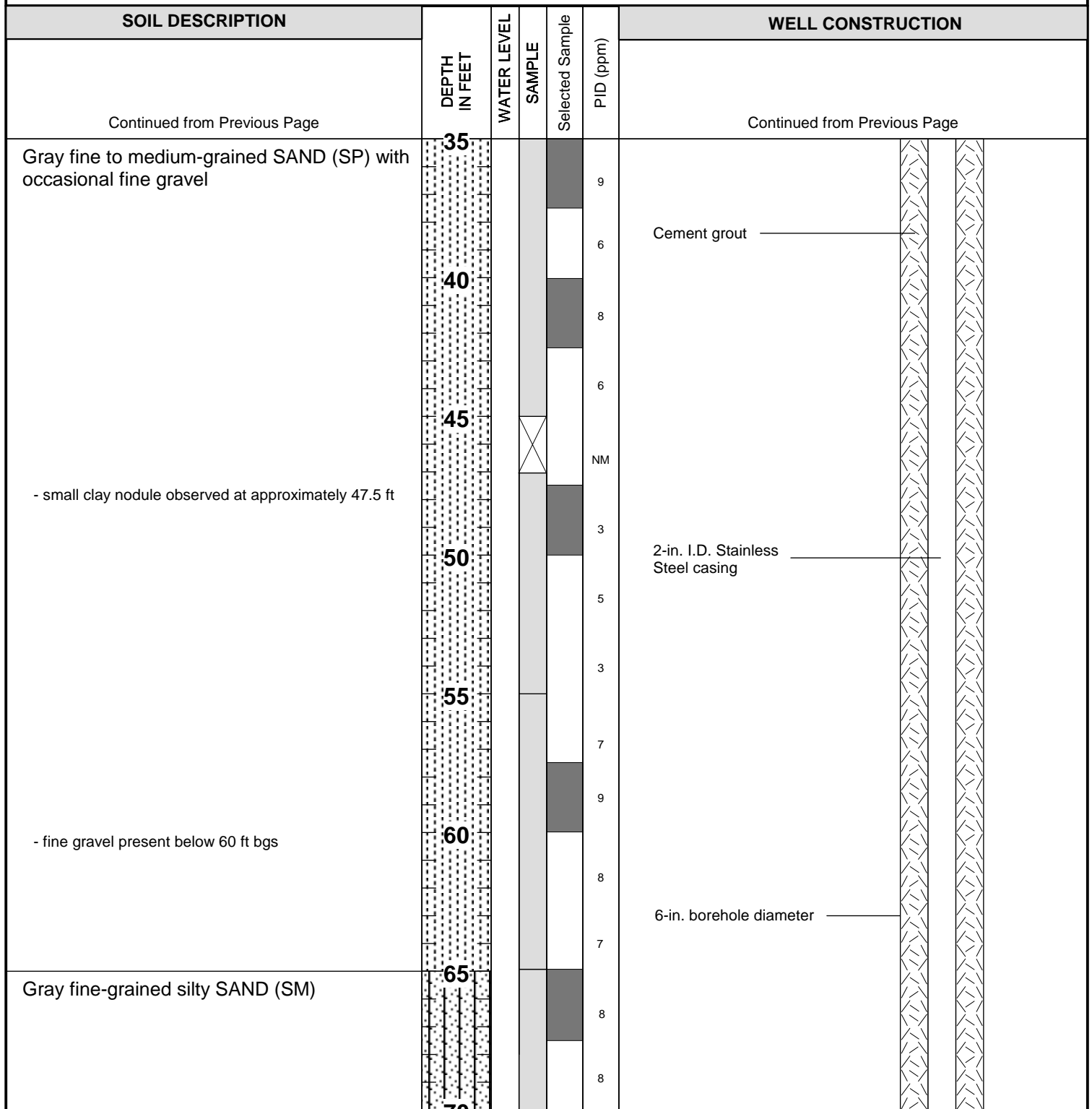
A1-10

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 28, 2004
 GROUND SURFACE ELEV: 409.4 ft, MSL
 TOP OF CASING ELEV: 412.35 ft, MSL
 WELL COORDINATES: N 701175.6 ft E 2295675.0 ft



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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

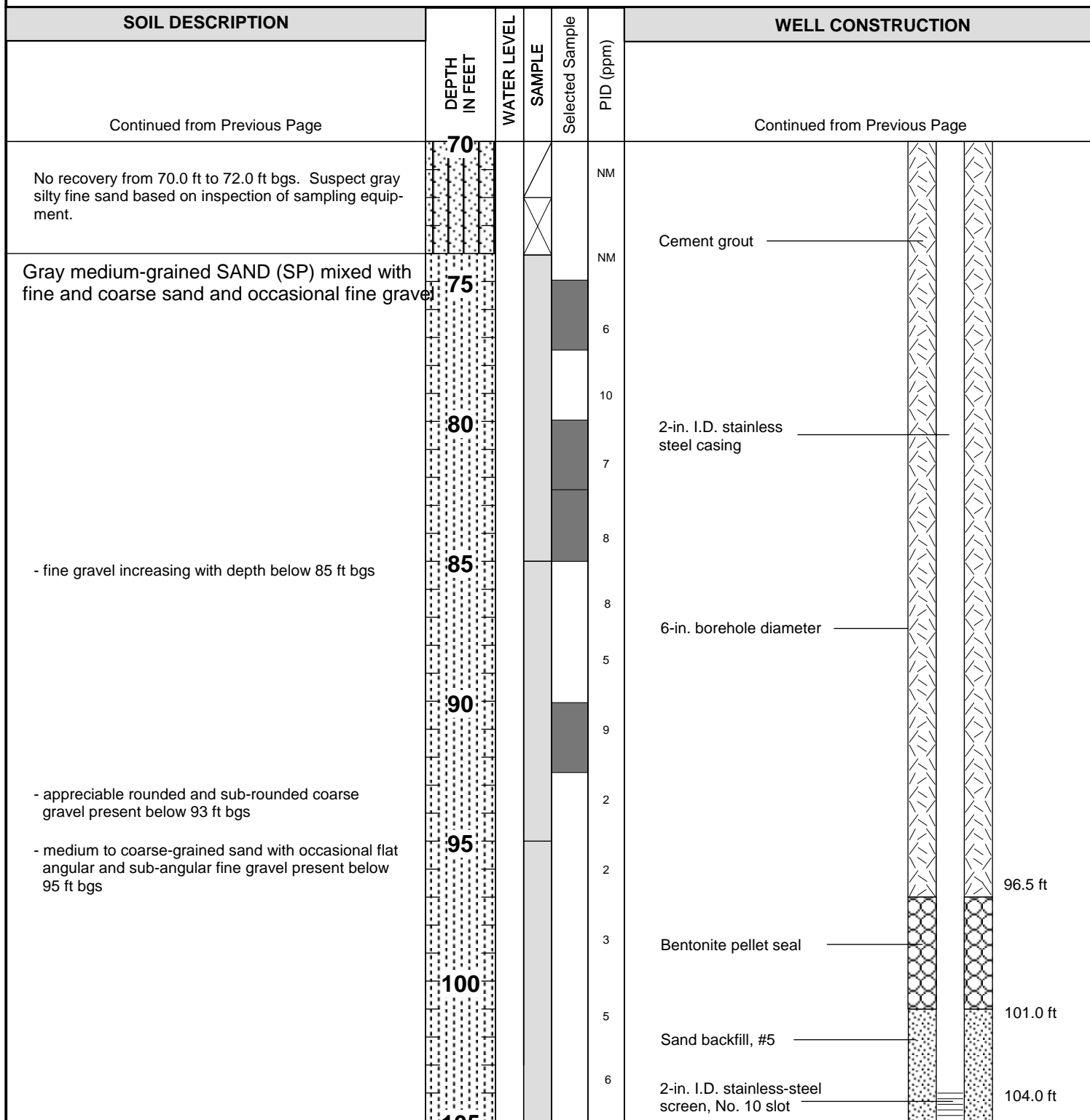
A1-10

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 28, 2004
 GROUND SURFACE ELEV: 409.4 ft, MSL
 TOP OF CASING ELEV: 412.35 ft, MSL
 WELL COORDINATES: N 701175.6 ft E 2295675.0 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

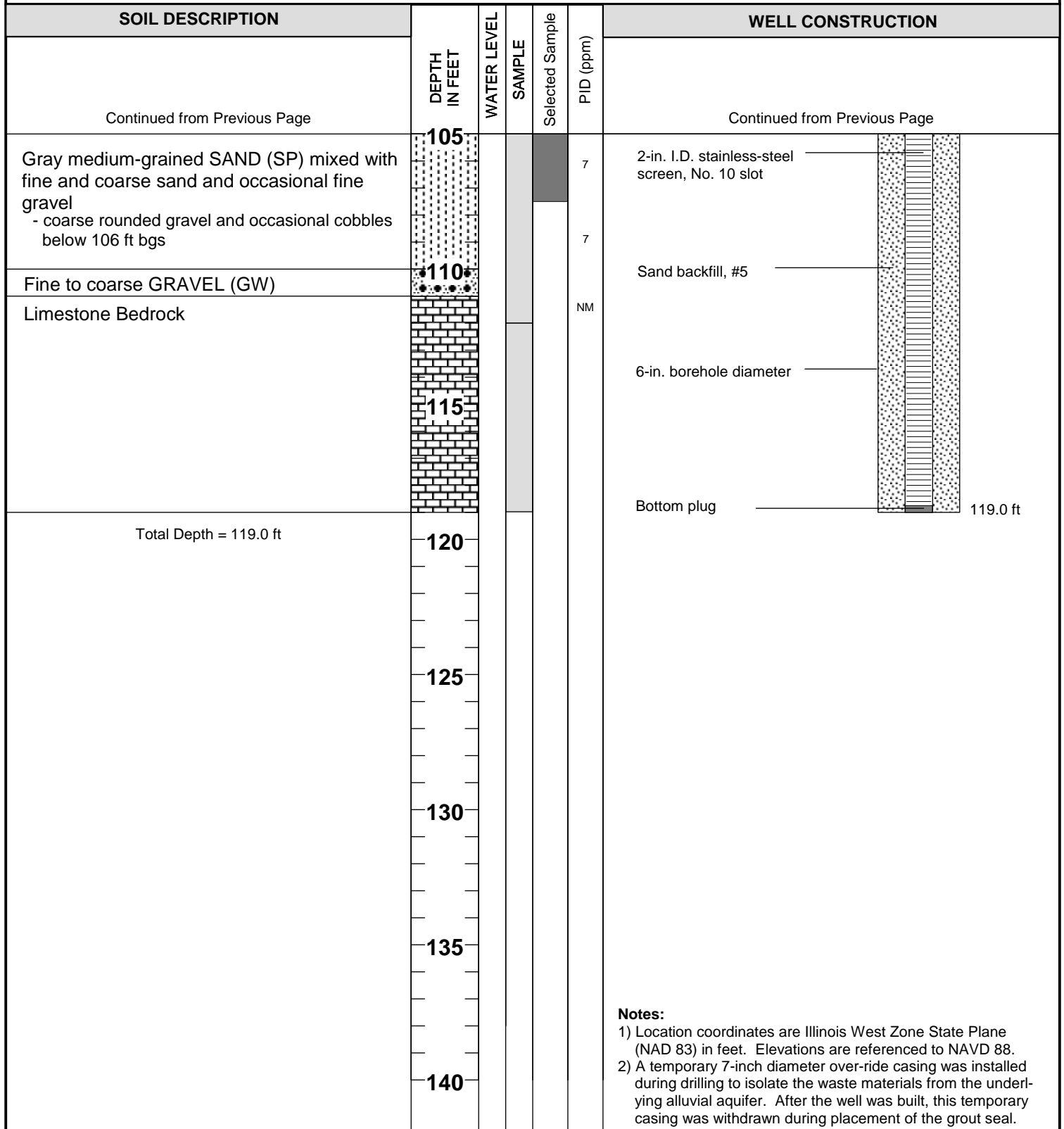
A1-10

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 28, 2004
 GROUND SURFACE ELEV: 409.4 ft, MSL
 TOP OF CASING ELEV: 412.35 ft, MSL
 WELL COORDINATES: N 701175.6 ft E 2295675.0 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-10

Sauget Area 1
Sauget and Cahokia, Illinois

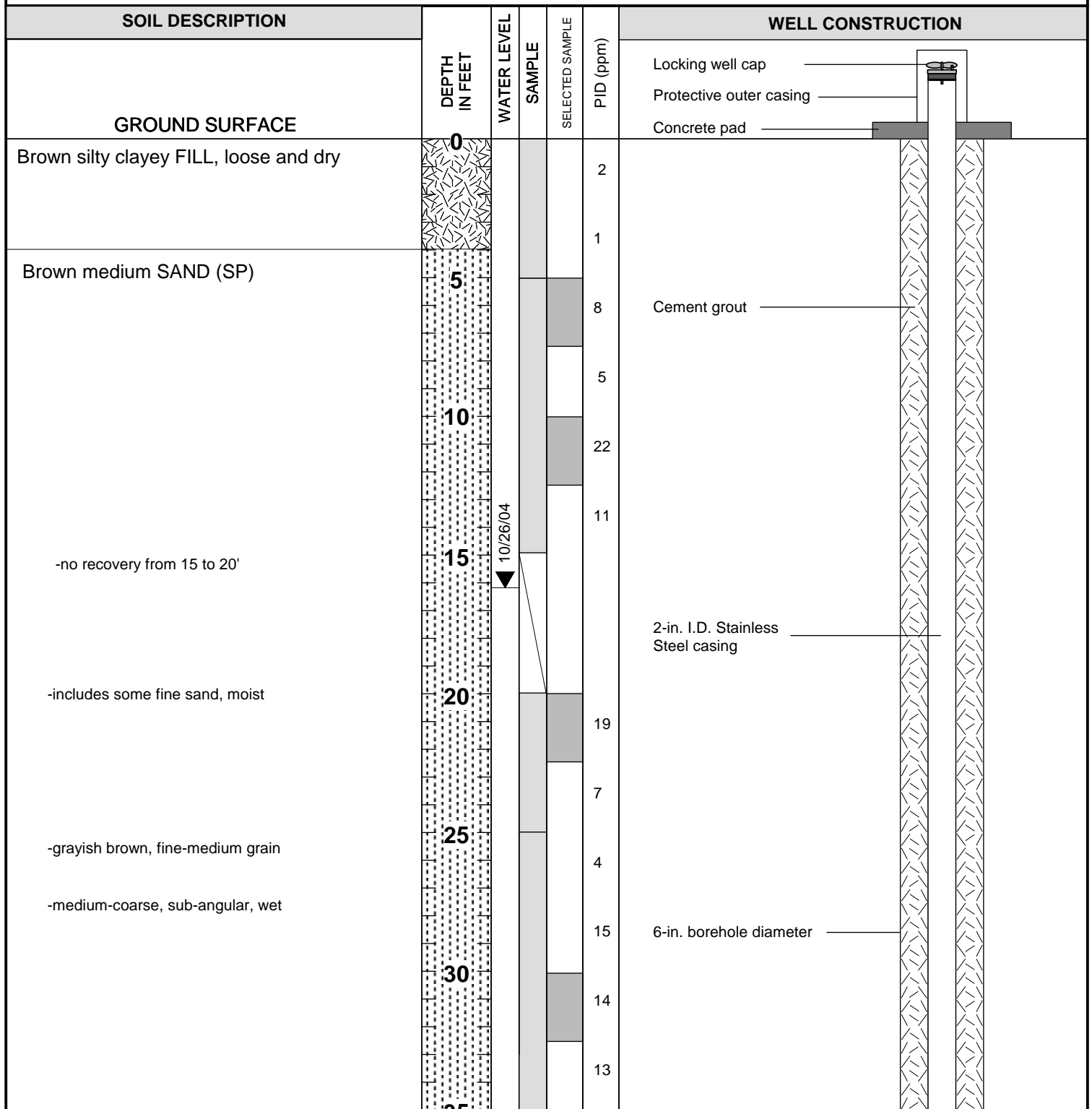
GSI Job No. G-2876

Page 4 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 15, 2004
 GROUND SURFACE ELEV.: 410.9 ft MSL
 TOP OF CASING ELEV.: 413.84 ft MSL
 COORDINATES: N 701546.5 ft ; E 2295896.2 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-11

Sauget Area 1
 Sauget and Cahokia, Illinois

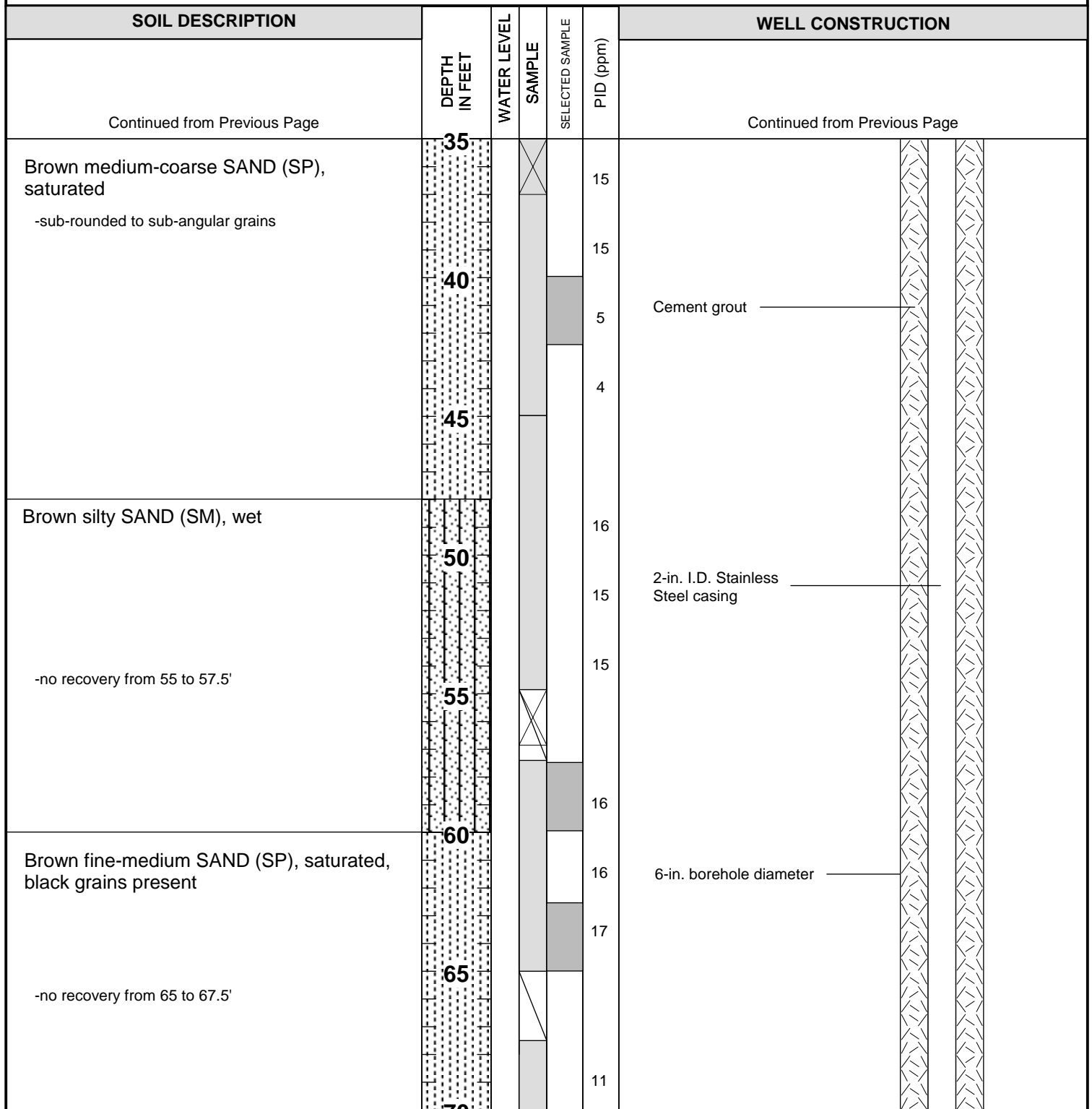
GSI Job No. G-2876

Page 1 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 15, 2004
 GROUND SURFACE ELEV.: 410.9 ft MSL
 TOP OF CASING ELEV.: 413.84 ft MSL
 COORDINATES: N 701546.5 ft ; E 2295896.2 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

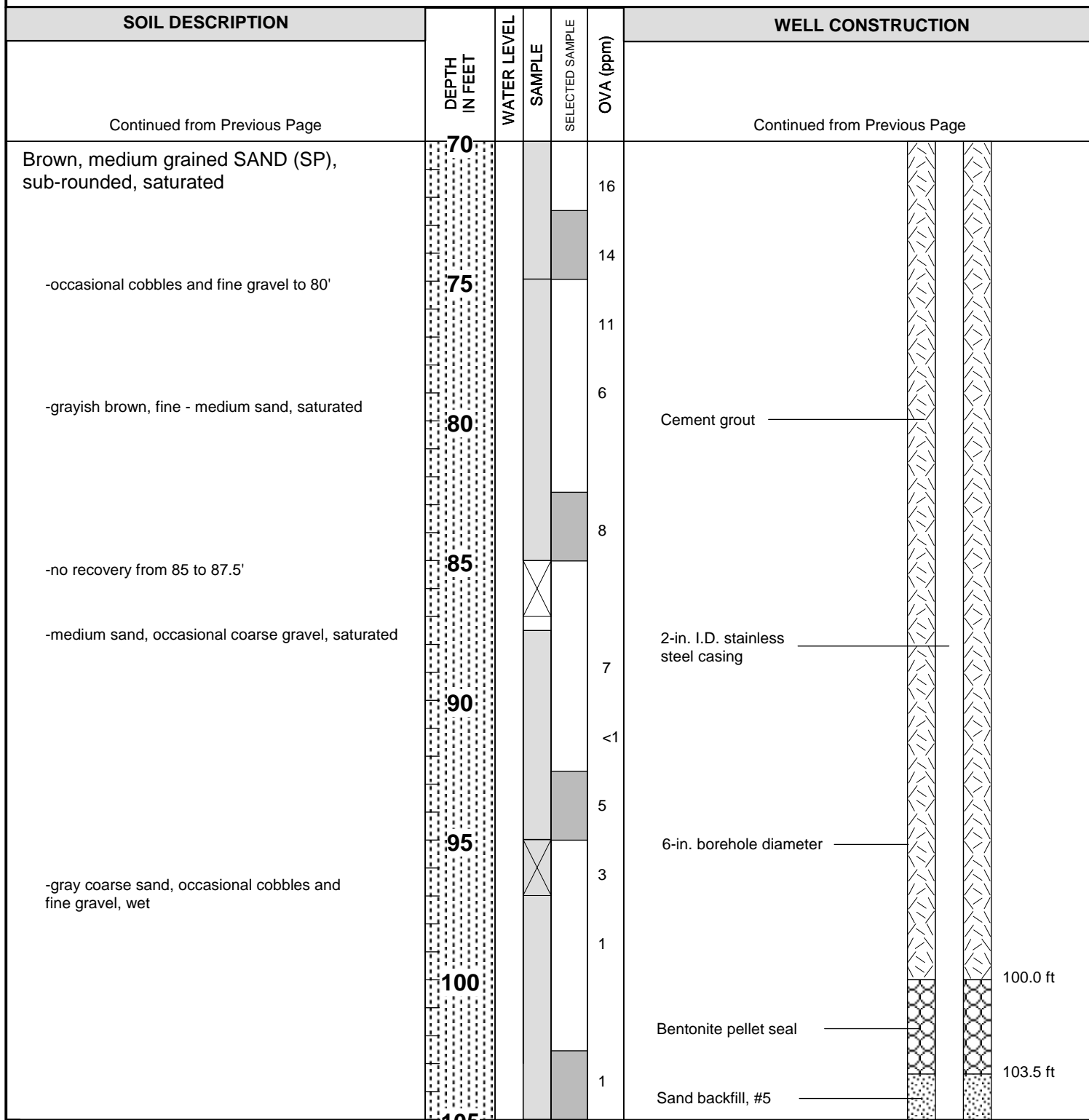
A1-11

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 15, 2004
 GROUND SURFACE ELEV.: 410.9 ft MSL
 TOP OF CASING ELEV.: 413.84 ft MSL
 COORDINATES: N 701546.5 ft ; E 2295896.2 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.


LOG & AS-BUILT DIAGRAM

A1-11

Sauget Area 1
Sauget and Cahokia, Illinois

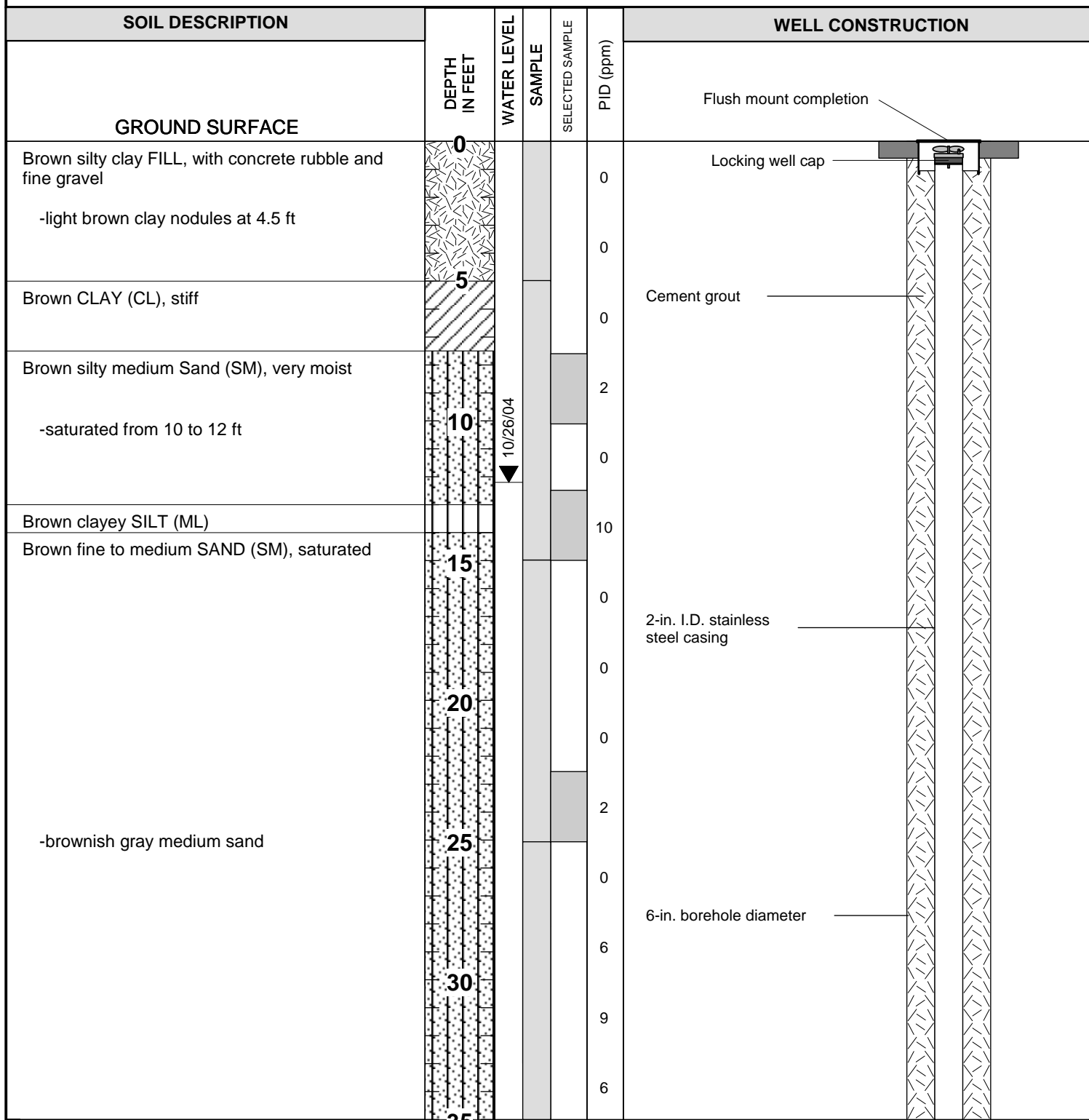
GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

COMPLETION DATE: September 15, 2004
GROUND SURFACE ELEV.: 410.9 ft MSL
TOP OF CASING ELEV.: 413.84 ft MSL
COORDINATES: N 701546.5 ft : E 2295896.2 ft

 <p>GROUNDWATER SERVICES, INC.</p>	<p align="center">LOG & AS-BUILT DIAGRAM</p> <p align="center">A1-11</p>	<p>GSI Job No. G-2876</p> <p>Page 4 of 4</p> <p>Issued: 1/21/05</p>
	<p align="center">Sauget Area 1 Sauget and Cahokia, Illinois</p>	

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 5, 2004
 GROUND SURFACE ELEV.: 406.3 ft MSL
 TOP OF CASING ELEV.: 406.00 ft MSL
 COORDINATES: N 701017.0 ft ; E 2294750.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

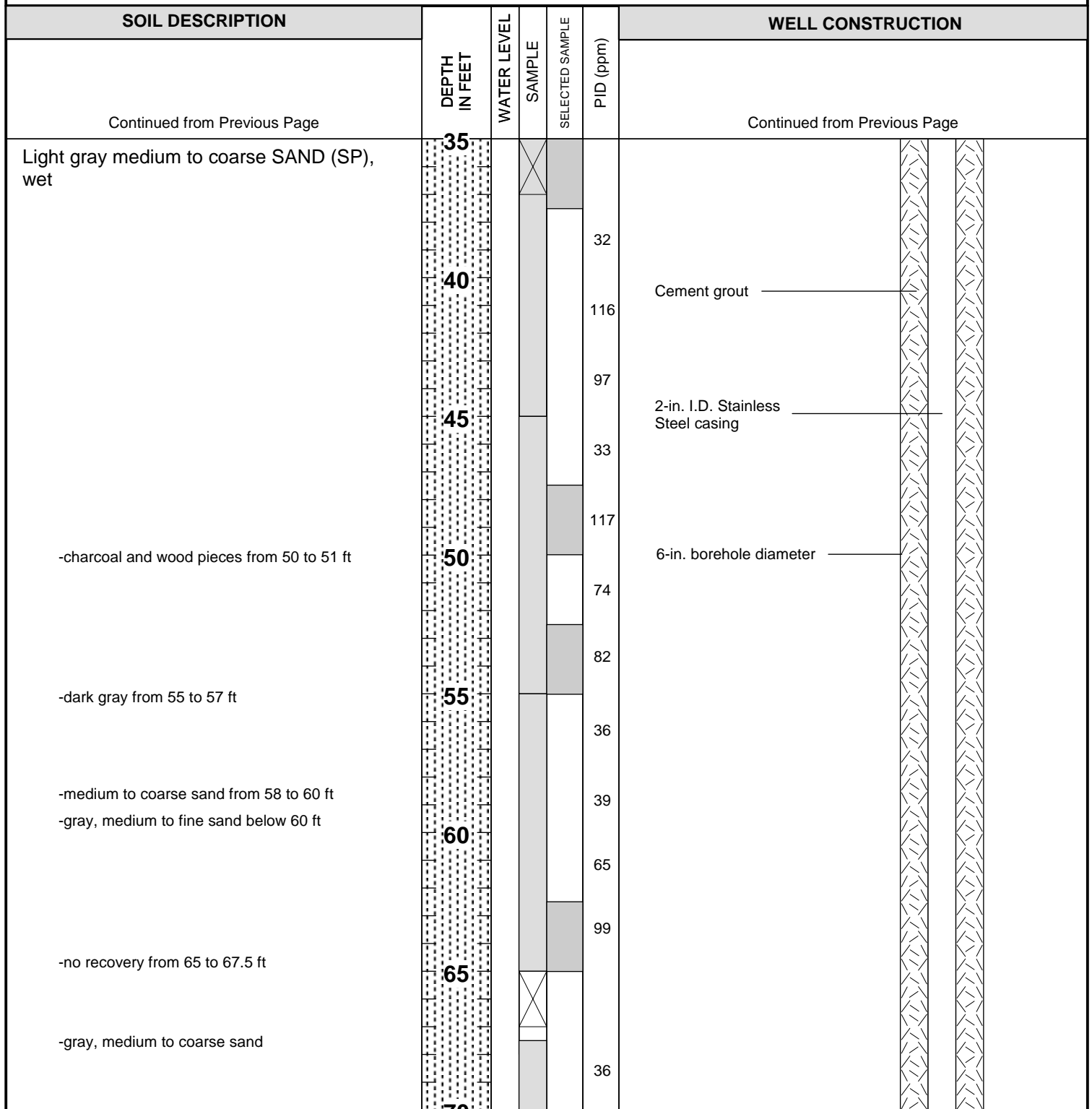
A1-12

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 5, 2004
 GROUND SURFACE ELEV.: 406.3 ft MSL
 TOP OF CASING ELEV.: 406.00 ft MSL
 COORDINATES: N 701017.0 ft ; E 2294750.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

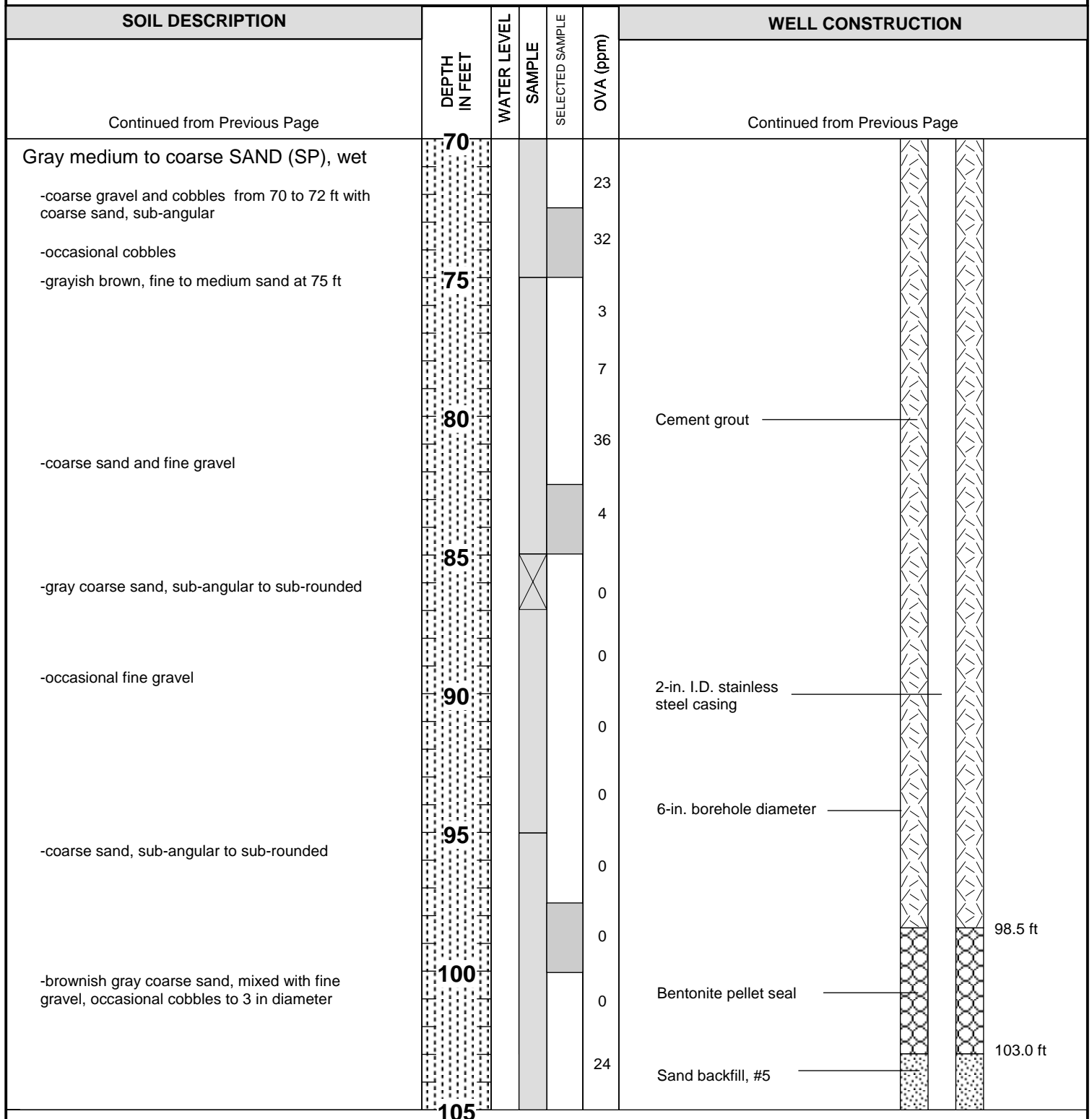
A1-12

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 5, 2004
 GROUND SURFACE ELEV.: 406.3 ft MSL
 TOP OF CASING ELEV.: 406.00 ft MSL
 COORDINATES: N 701017.0 ft ; E 2294750.3 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-12

Sauget Area 1
Sauget and Cahokia, Illinois

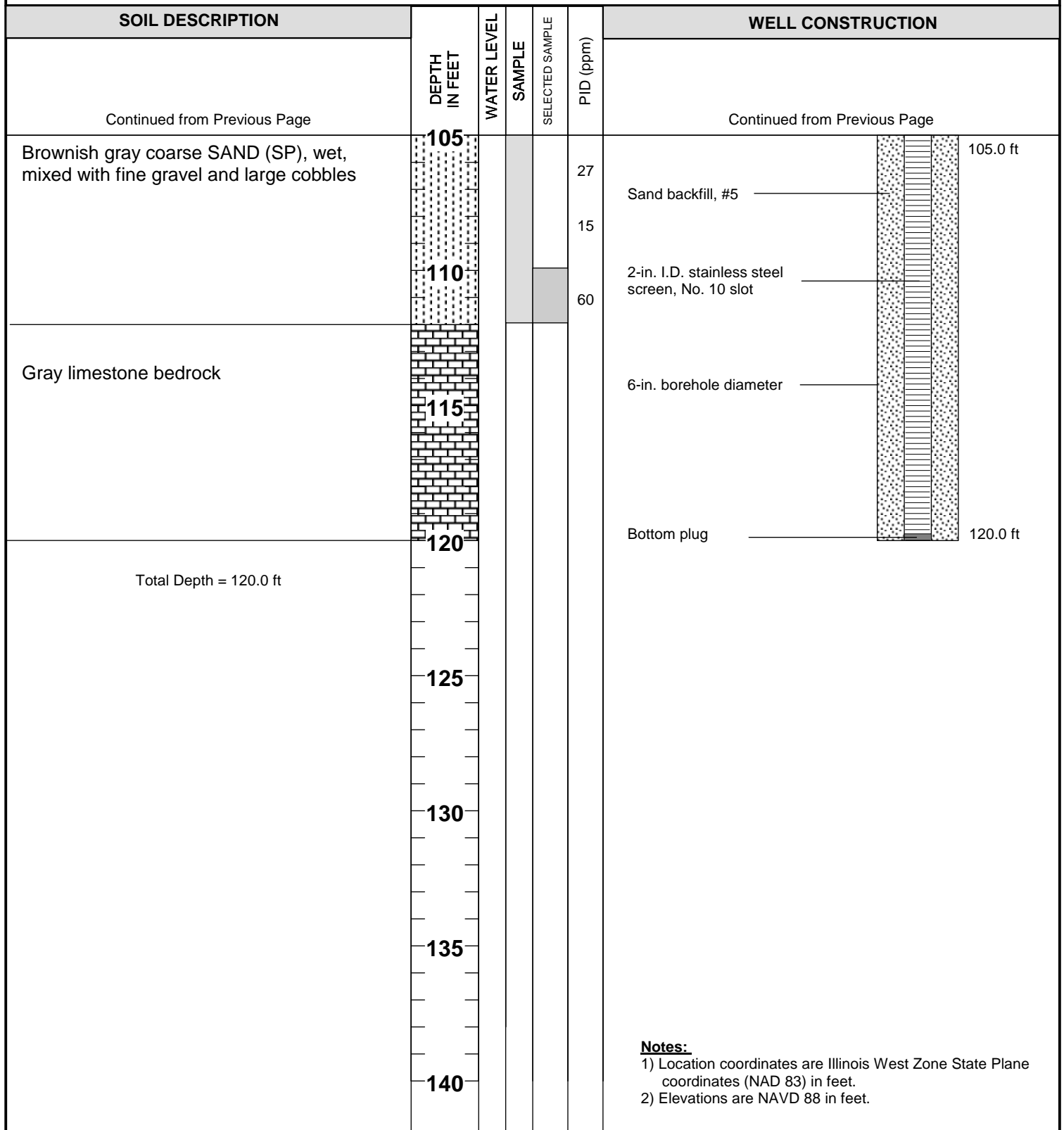
GSI Job No. G-2876

Page 3 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 5, 2004
 GROUND SURFACE ELEV.: 406.3 ft MSL
 TOP OF CASING ELEV.: 406.00 ft MSL
 COORDINATES: N 701017.0 ft ; E 2294750.3 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

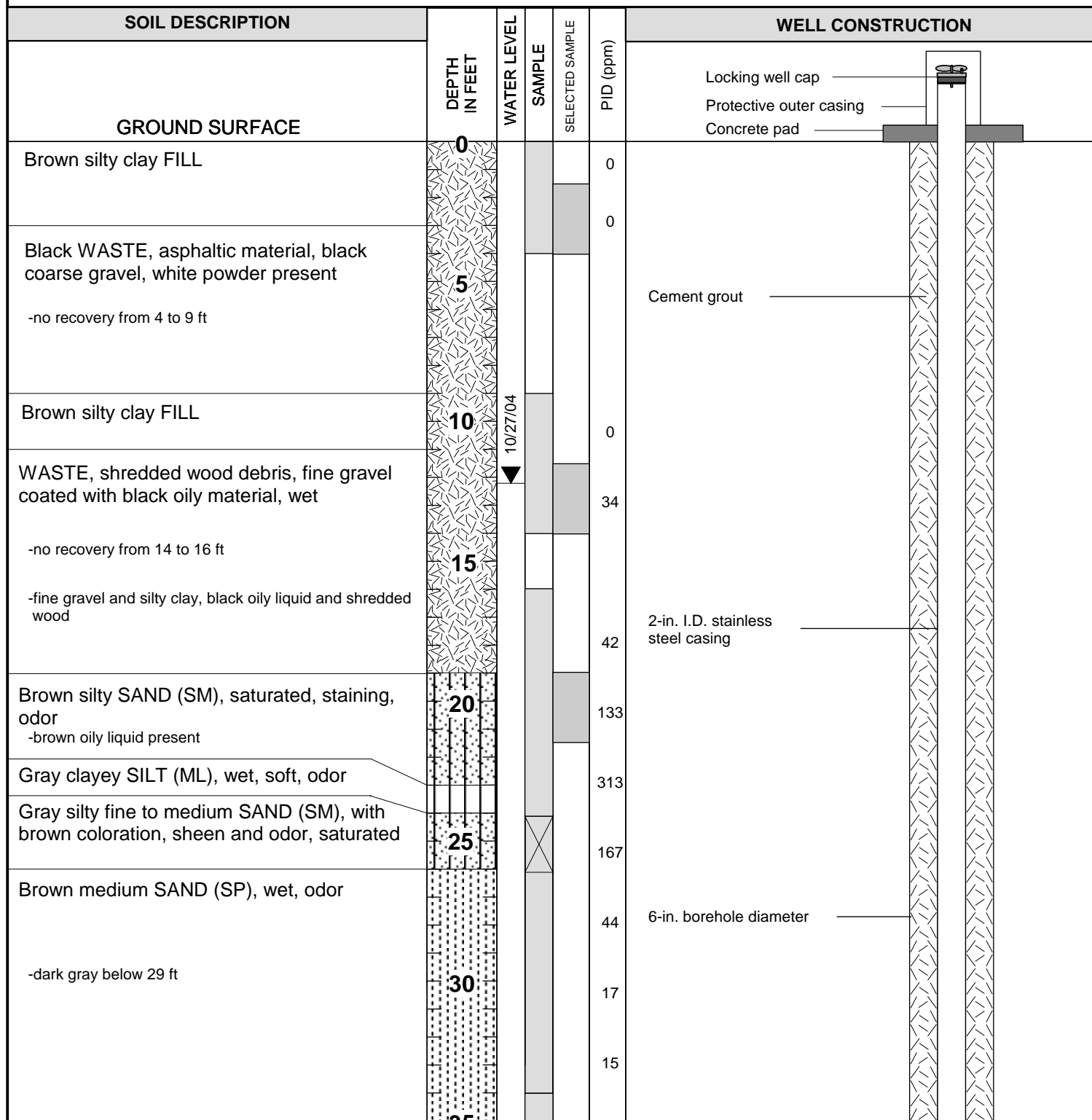
A1-12

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch with 7 inch over-ride casing to 20 ft bgs)

COMPLETION DATE: October 10, 2004
 GROUND SURFACE ELEV. 406.4 ft MSL
 TOP OF CASING ELEV. 409.38 ft MSL
 COORDINATES: N 699960.4 ft ; E 2294733.6 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-13

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/12/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 9, 2004
 GROUND SURFACE ELEV. 406.4 ft MSL
 TOP OF CASING ELEV. 409.38 ft MSL
 COORDINATES: N 699960.4 ft ; E 2294733.6 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Dark gray medium SAND (SP), wet, odor	35			3	
				0	
	40			0	Cement grout
				0	
	45			0	2-in. I.D. Stainless Steel casing
				0	
	50			0	6-in. borehole diameter
				0	
-gray fine sand				0	
				0	
-gray coarse sand, occasional coarse gravel and cobbles	55			0	
				0	
-medium-coarse sand				0	
	60			0	
				0	
	65			0	
-frequent coarse gravel and cobbles				0	
				0	
	70			0	

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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

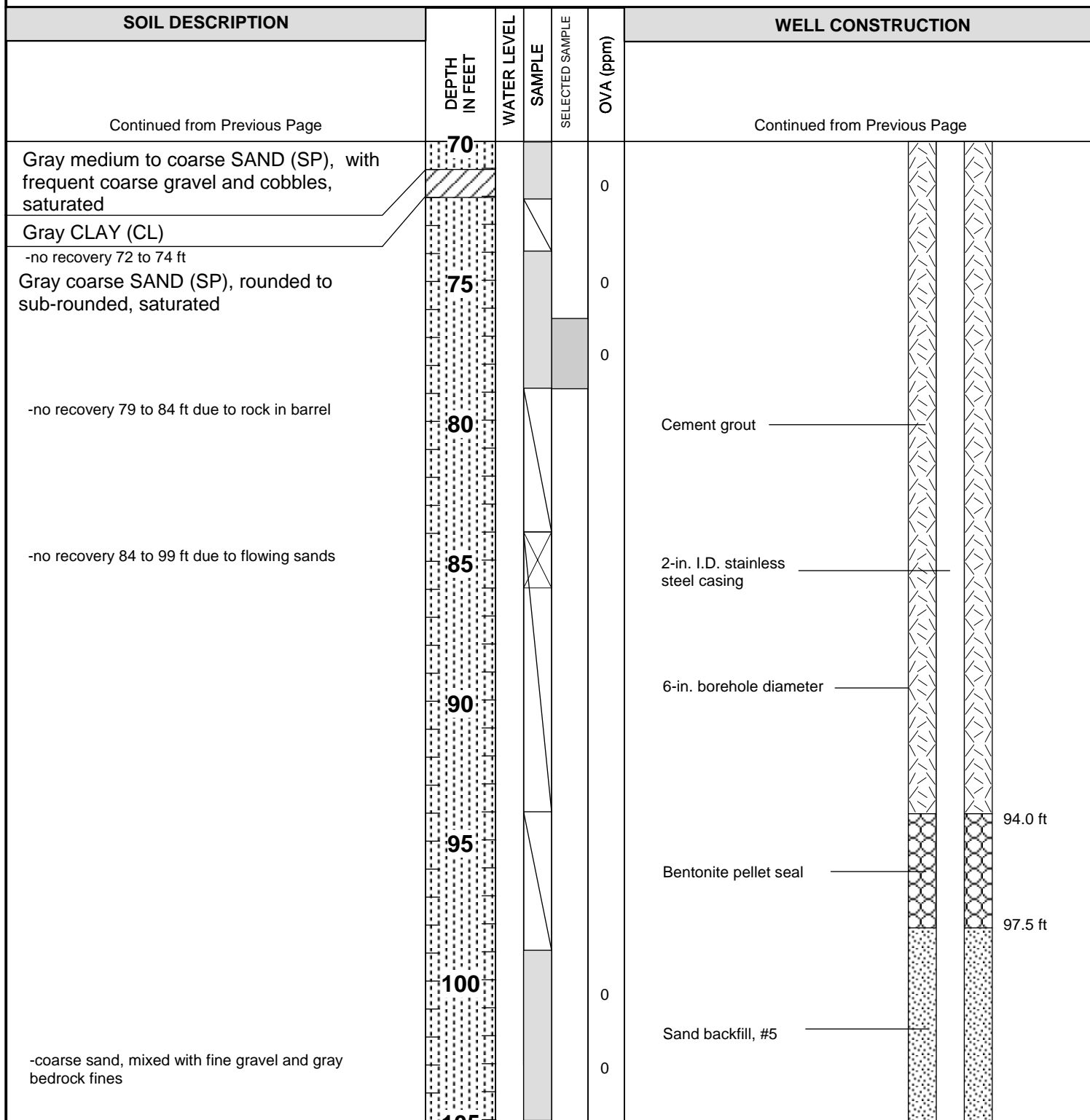
A1-13

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 9, 2004
 GROUND SURFACE ELEV. 406.4 ft MSL
 TOP OF CASING ELEV. 409.38 ft MSL
 COORDINATES: N 699960.4 ft ; E 2294733.6 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

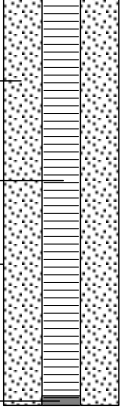
A1-13

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 9, 2004
 GROUND SURFACE ELEV. 406.4 ft MSL
 TOP OF CASING ELEV. 409.38 ft MSL
 COORDINATES: N 699960.4 ft ; E 2294733.6 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page						Continued from Previous Page
Gray coarse SAND (SP), saturated -brown, mixed with fine gravel and occasional cobbles -gray fines from pulverized bedrock noted in core	105				0	 <p>Sand backfill, #5</p> <p>2-in. I.D. stainless steel screen, No. 10 slot</p> <p>6-in. borehole diameter</p> <p>Bottom plug</p> <p>115.5 ft</p>
					0	
Gray limestone bedrock, competent	110				0	
	115					
Total Depth = 115.5 ft						
	120					
	125					
	130					
	135					
	140					

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.
- 3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-13

Sauget Area 1
 Sauget and Cahokia, Illinois

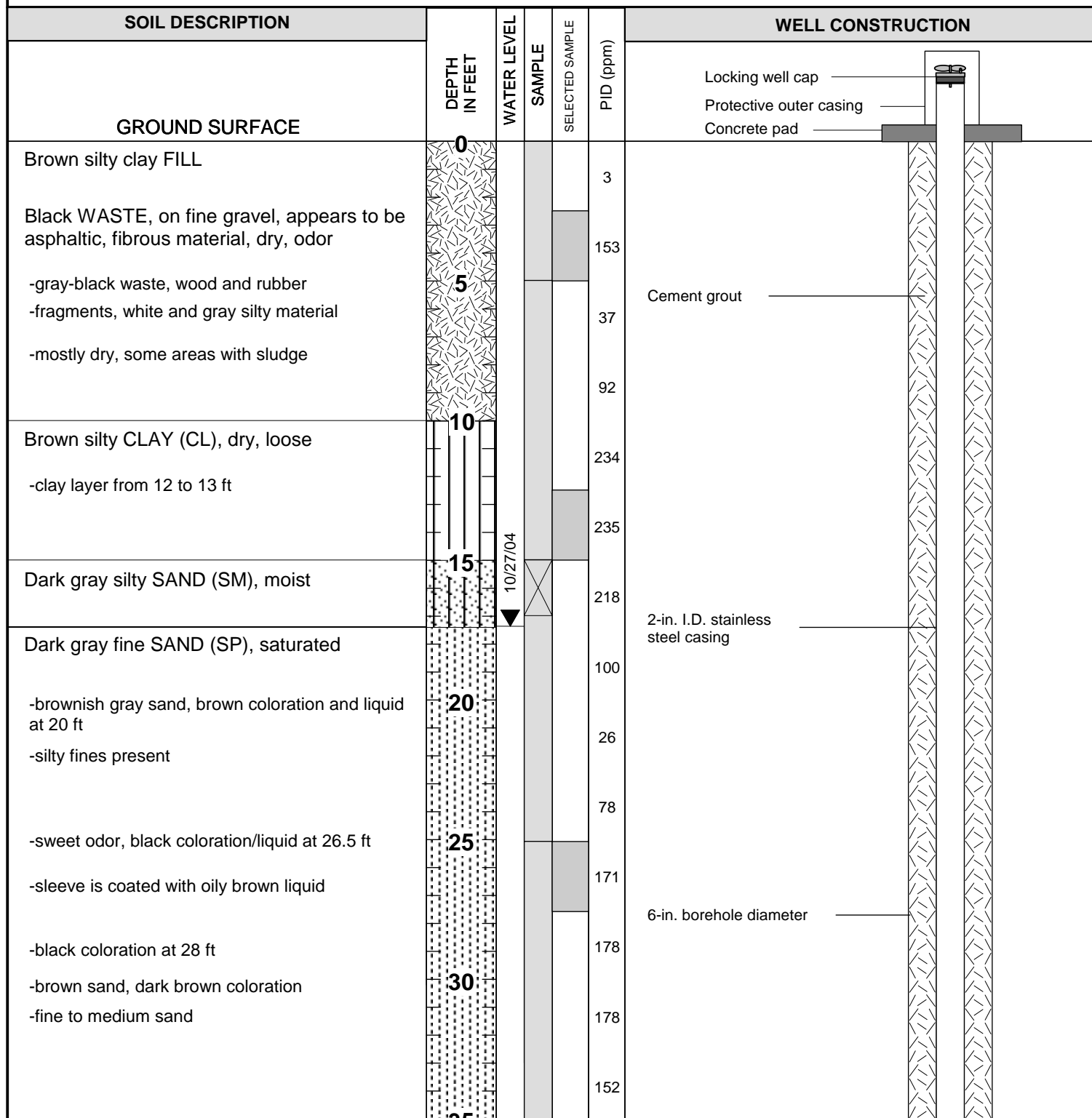
GSI Job No. G-2876

Page 4 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7-inch over-ride casing to 20 ft bgs)

COMPLETION DATE: October 11, 2004
 GROUND SURFACE ELEV.: 411.6 ft MSL
 TOP OF CASING ELEV.: 414.80 ft MSL
 COORDINATES: N 700042.0 ft ; E 2294913.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-14

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876

Page 1 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 11, 2004
 GROUND SURFACE ELEV.: 411.6 ft MSL
 TOP OF CASING ELEV.: 414.80 ft MSL
 COORDINATES: N 700042.0 ft ; E 2294913.7 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Brownish gray fine SAND (SP), wet	35			124	
-free product layer					
-coarse sand, dark brown free product layer				128	
-sand, black from free product	40			226	Cement grout
				177	
-medium sand, black liquid staining	45			105	2-in. I.D. Stainless Steel casing
				40	
	50			64	6-in. borehole diameter
-black stain at 52 ft				77	
-gray, medium sand, no evidence of free product below 55 ft	55			18	
-occasional cobbles				85	
-dark gray medium to coarse sand	60			51	
-light gray medium to coarse sand				5	
-sheen noted on soil core	65			14	
-sheen and brown layer noted on soil core					
	70				

Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

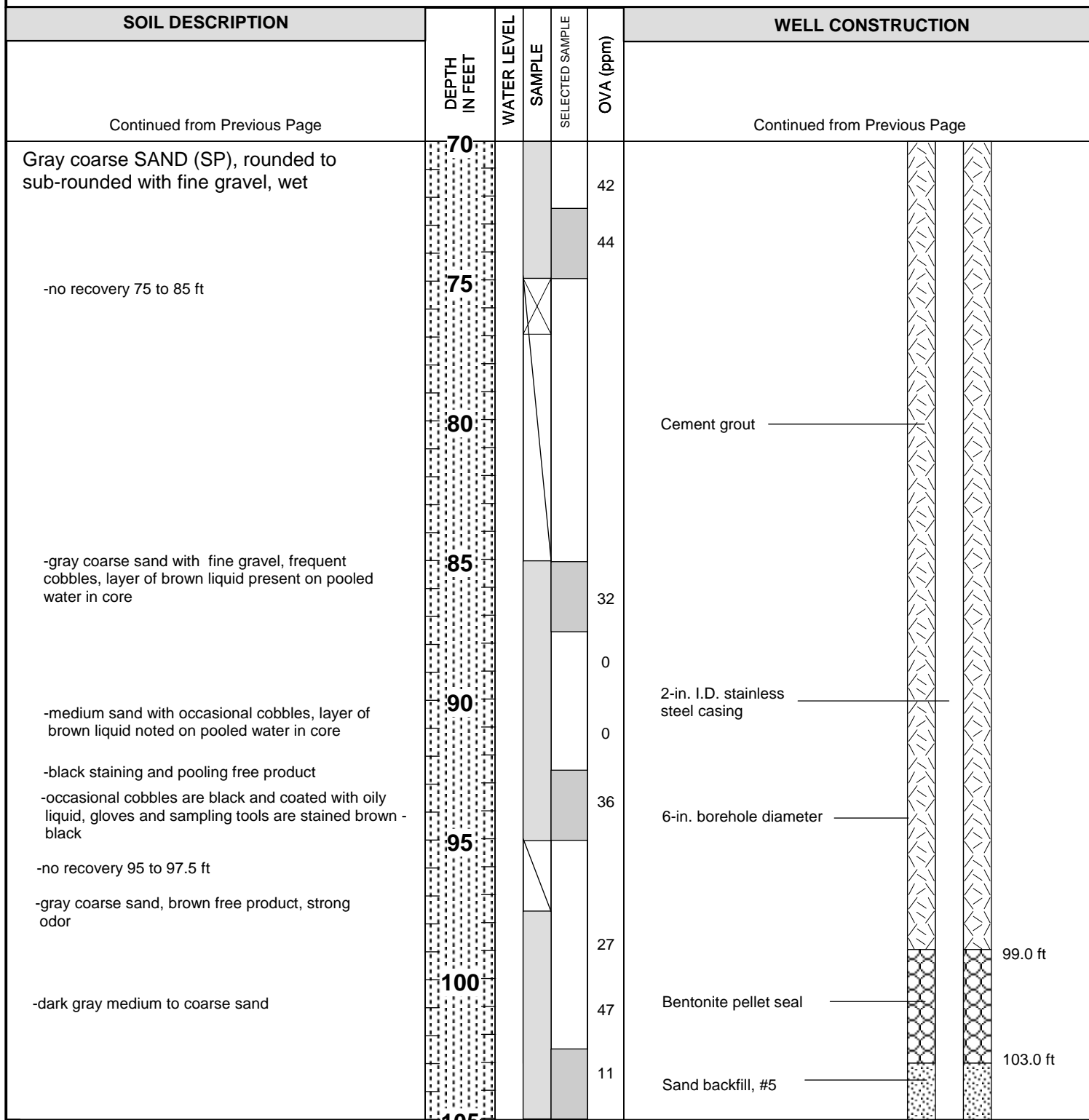
A1-14

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 11, 2004
 GROUND SURFACE ELEV.: 411.6 ft MSL
 TOP OF CASING ELEV.: 414.80 ft MSL
 COORDINATES: N 700042.0 ft ; E 2294913.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

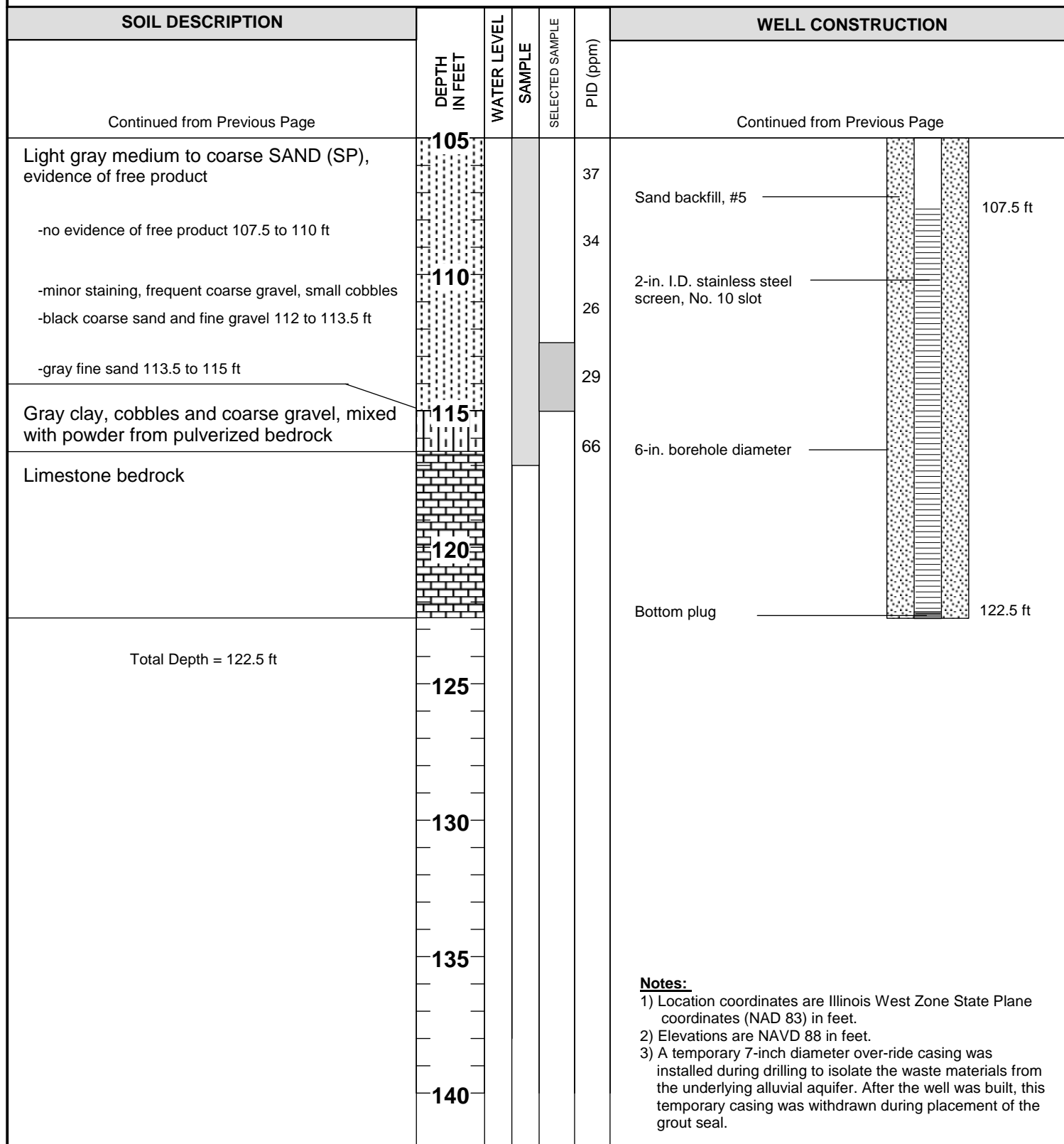
A1-14

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 11, 2004
 GROUND SURFACE ELEV.: 411.6 ft MSL
 TOP OF CASING ELEV.: 414.80 ft MSL
 COORDINATES: N 700042.0 ft ; E 2294913.7 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

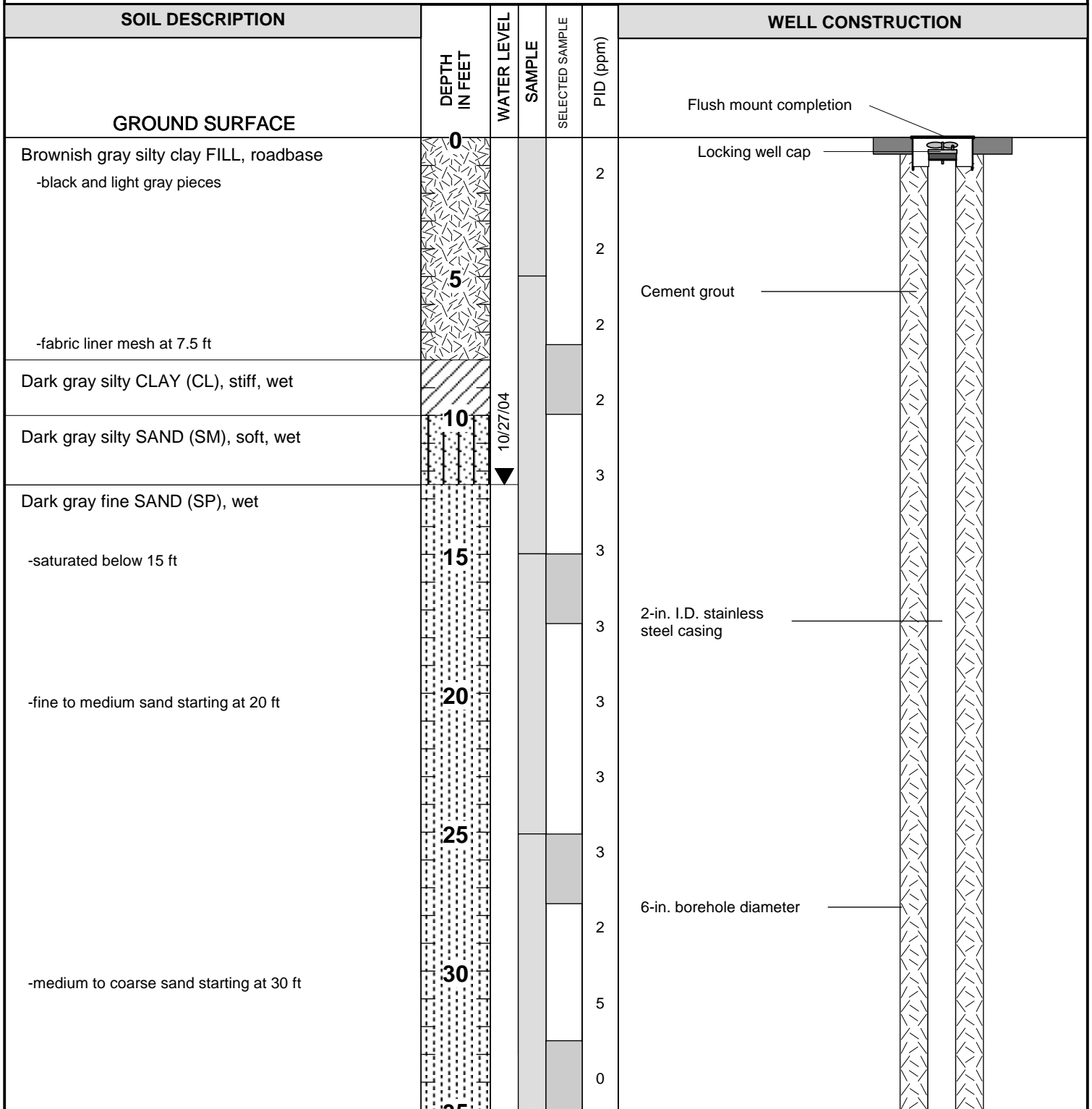
A1-14

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 13, 2004
 GROUND SURFACE ELEV. 407.1 ft MSL
 TOP OF CASING ELEV. 406.77 ft MSL
 COORDINATES: N 700265.9 ft ; E 2294901.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-15

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 13, 2004
 GROUND SURFACE ELEV. 407.1 ft MSL
 TOP OF CASING ELEV. 406.77 ft MSL
 COORDINATES: N 700265.9 ft ; E 2294901.7 ft

SOIL DESCRIPTION	DEPTH IN FEET	WATER LEVEL	SAMPLE SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION
Continued from Previous Page					Continued from Previous Page
Gray medium SAND (SP), saturated	35			5	
- medium to coarse from 37 to 40 ft	40			4	
-medium sand below 40 ft, wet	40			4	Cement grout
	45			1	
	45			5	2-in. I.D. Stainless Steel casing
	50			4	
- wood pieces	50			6	6-in. borehole diameter
	55			1	
-medium sand with fine gravel and occasional coarse gravel	55			1	
	60			1	
-medium to coarse sand with occasional fine gravel, wet	60			1	
-no recovery 62.5 to 67.5 ft	65			0	
-dark gray medium to coarse sand, wet	65				
	70				

Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

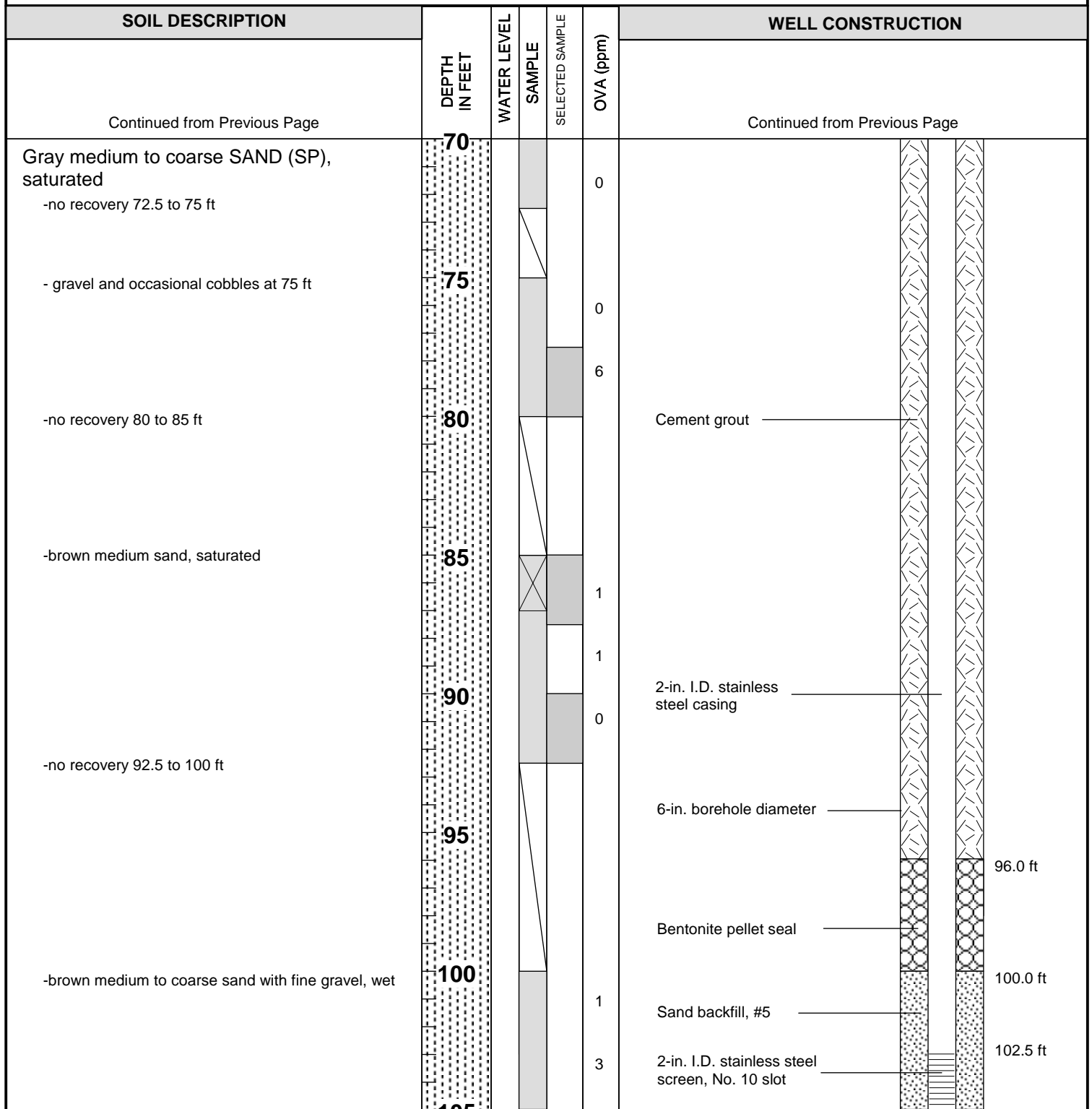
A1-15

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 13, 2004
 GROUND SURFACE ELEV. 407.1 ft MSL
 TOP OF CASING ELEV. 406.77 ft MSL
 COORDINATES: N 700265.9 ft ; E 2294901.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-15


Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876

Page 3 of 4

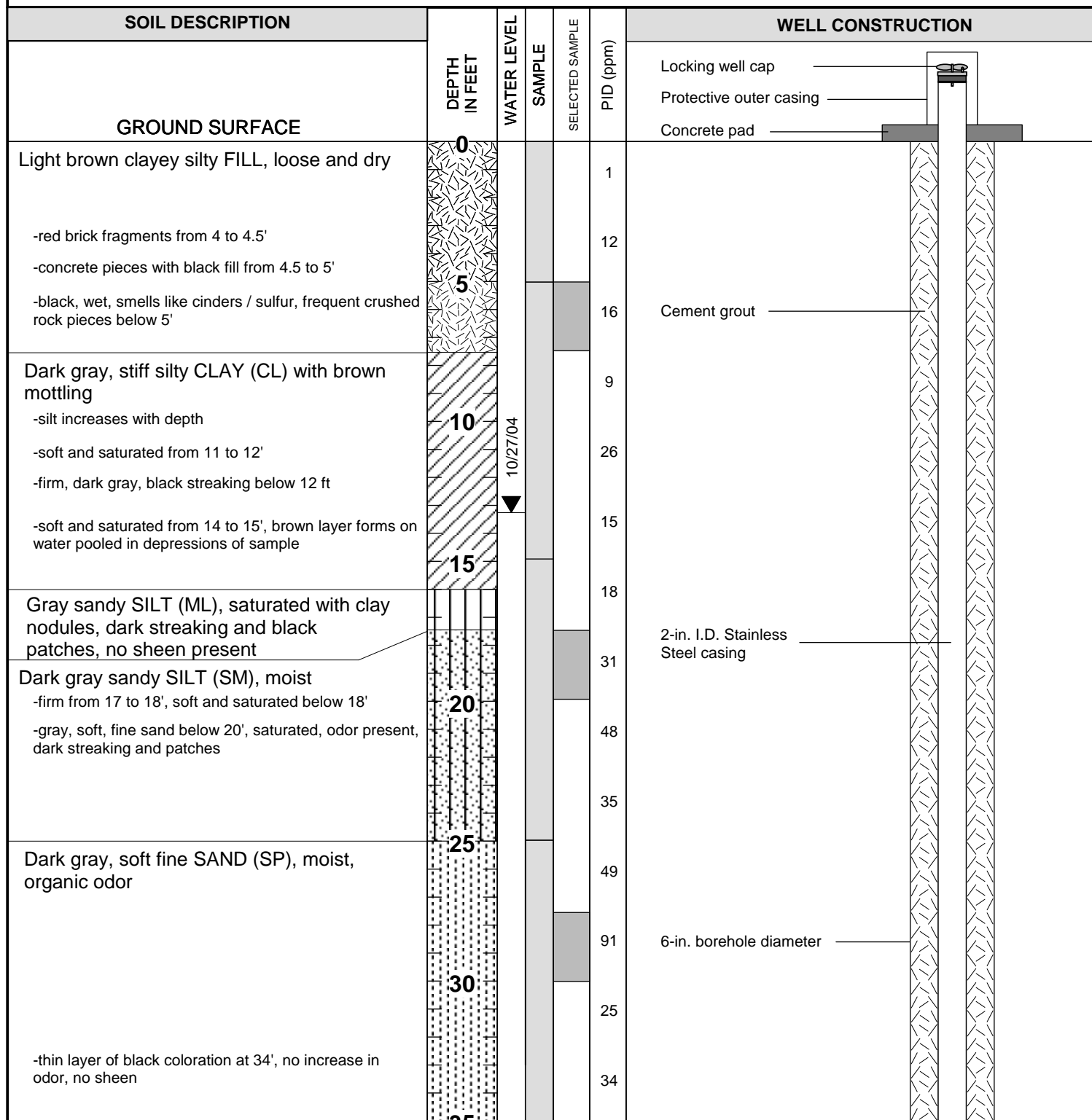
Issued: 1/21/05

COMPLETION DATE: October 13, 2004
GROUND SURFACE ELEV. 407.1 ft MSL
TOP OF CASING ELEV. 406.77 ft MSL
COORDINATES: N 700265.9 ft ; E 2294901.7 ft

 <p>GROUNDWATER SERVICES, INC.</p>	<p align="center">LOG & AS-BUILT DIAGRAM</p> <p align="center">A1-15</p>	<p>GSI Job No. G-2876</p> <p>Page 4 of 4</p> <p>Issued: 1/21/05</p>
	<p align="center">Sauget Area 1 Sauget and Cahokia, Illinois</p>	

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 25 ft bgs)

COMPLETION DATE: September 13, 2004
 GROUND SURFACE ELEV.: 407.3 ft MSL
 TOP OF CASING ELEV.: 410.24 ft MSL
 COORDINATES: N 700110.7 ft ; E 2294584.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

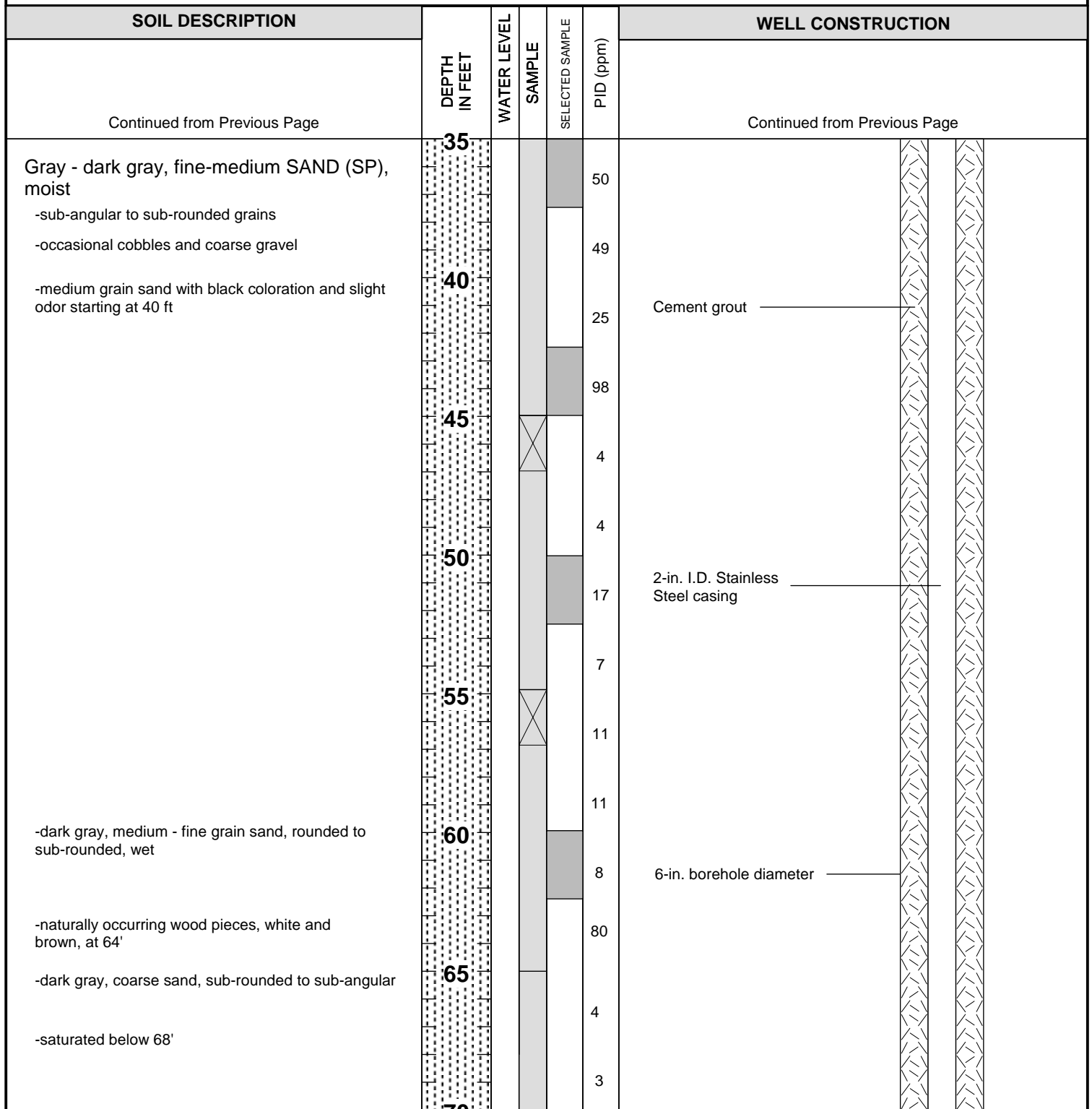
A1-16

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 13, 2004
 GROUND SURFACE ELEV.: 407.3 ft MSL
 TOP OF CASING ELEV.: 410.24 ft MSL
 COORDINATES: N 700110.7 ft ; E 2294584.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

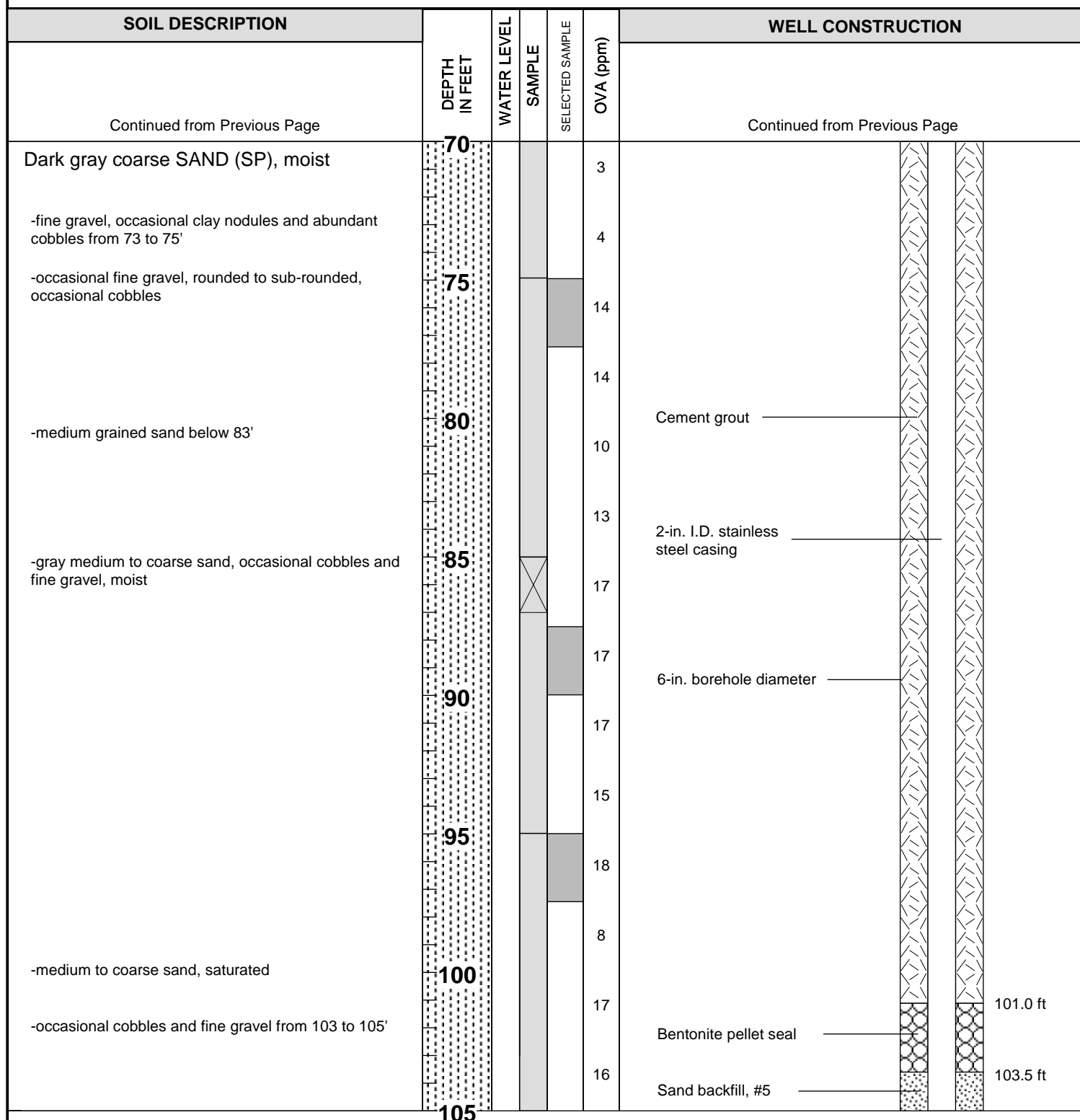
A1-16

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 2 of 4
 Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 13, 2004
 GROUND SURFACE ELEV.: 407.3 ft MSL
 TOP OF CASING ELEV.: 410.24 ft MSL
 COORDINATES: N 700110.7 ft ; E 2294584.7 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-16

Sauget Area 1
Sauget and Cahokia, Illinois

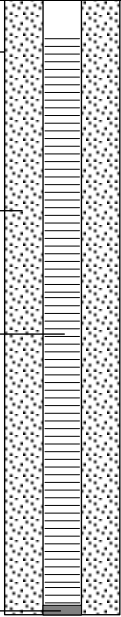
GSI Job No. G-2876

Page 3 of 4

Issued: 1/21/05

GEOLOGIST: Tim Nickels
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 13, 2004
 GROUND SURFACE ELEV.: 407.3 ft MSL
 TOP OF CASING ELEV.: 410.24 ft MSL
 COORDINATES: N 700110.7 ft ; E 2294584.7 ft

SOIL DESCRIPTION		DEPTH IN FEET	WATER LEVEL	SAMPLE	SELECTED SAMPLE	PID (ppm)	WELL CONSTRUCTION		
Continued from Previous Page							Continued from Previous Page		
Gray medium - coarse SAND (SP), saturated		105				23		106 ft	
-coarse sand, mixed with coarse gravel, frequent cobbles below 107 ft						19			
-slightly elevated chemical odor at 112 ft		110				19			
Limestone bedrock		115							
		120							
Total Depth = 121 ft									
		125							
		130							
		135							
		140							

Notes:

1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.

2) Elevations are NAVD 88 in feet.

3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.

Notes:

- 1) Location coordinates are Illinois West Zone State Plane coordinates (NAD 83) in feet.
- 2) Elevations are NAVD 88 in feet.
- 3) A temporary 7-inch diameter over-ride casing was installed during drilling to isolate the waste materials from the underlying alluvial aquifer. After the well was built, this temporary casing was withdrawn during placement of the grout seal.



LOG & AS-BUILT DIAGRAM

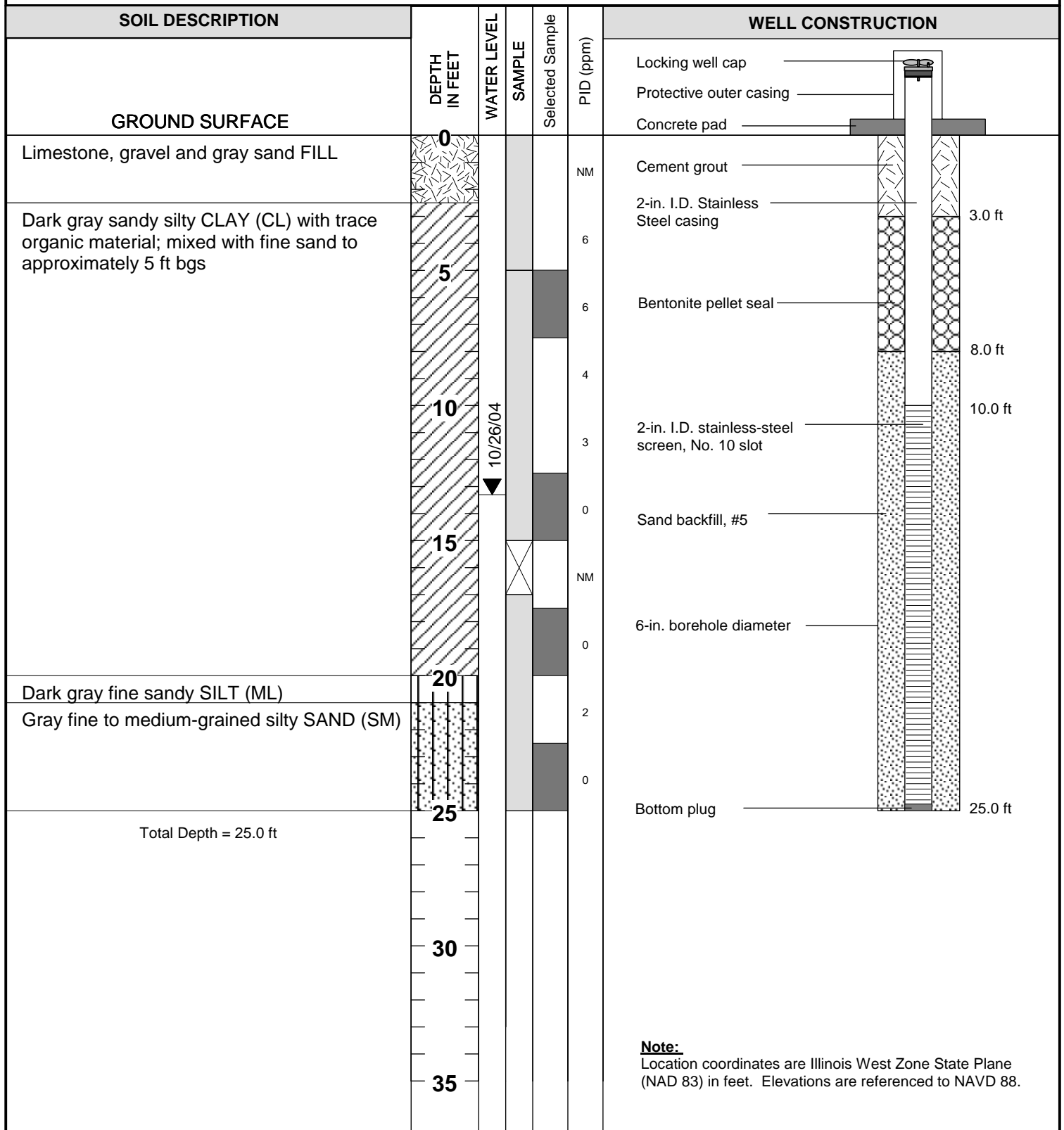
A1-16

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 30, 2004
 GROUND SURFACE ELEV: 407.2 ft, MSL
 TOP OF CASING ELEV: 410.33 ft, MSL
 WELL COORDINATES: N 700246.3 ft E 2294513.0 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-17

Sauget Area 1
 Sauget and Cahokia, Illinois

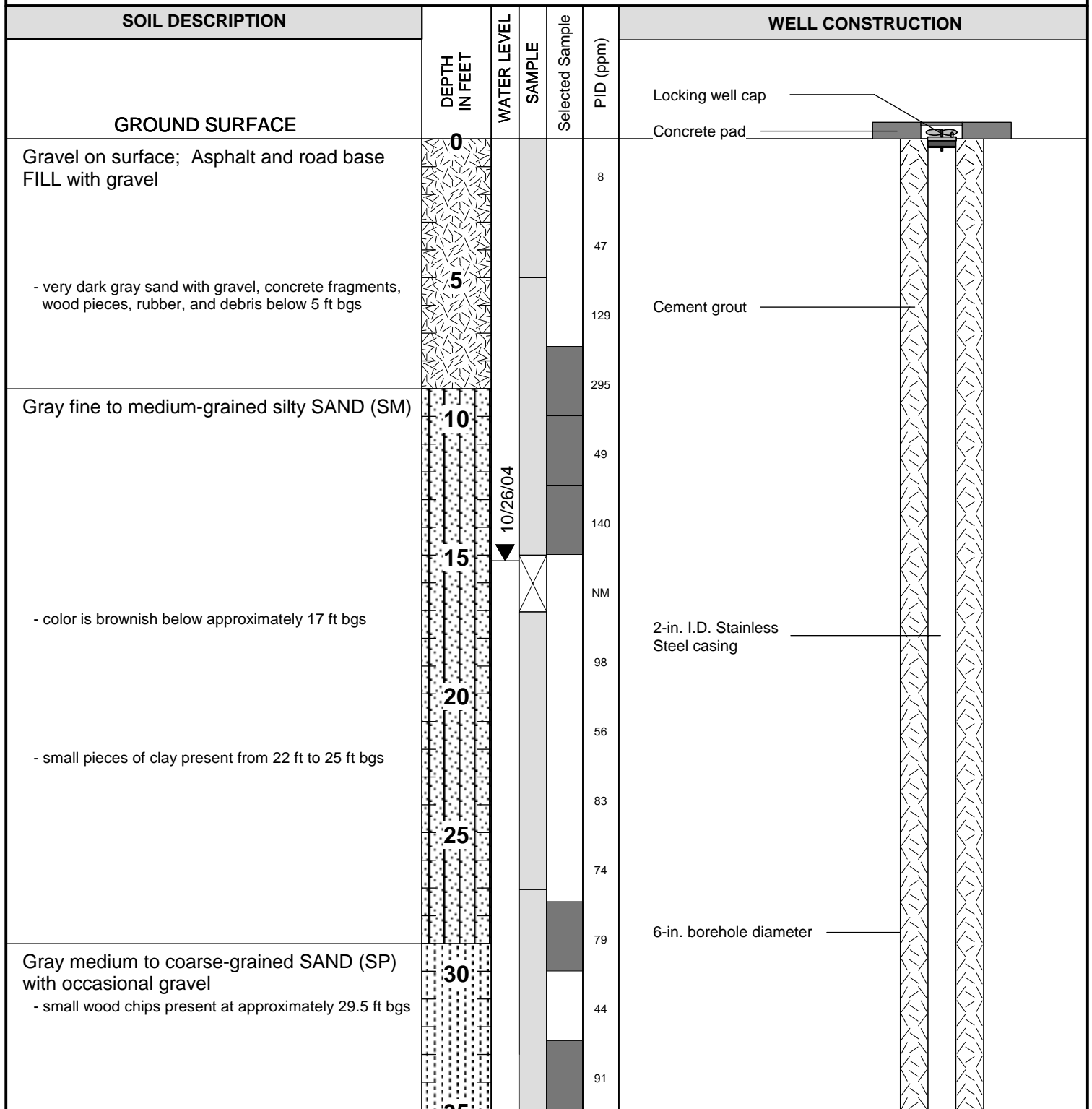
GSI Job No. G-2876

Page 1 of 1

Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 24, 2004
 GROUND SURFACE ELEV: 409.6 ft, MSL
 TOP OF CASING ELEV: 409.21 ft, MSL
 WELL COORDINATES: N 700142.7 ft E 2294318.5 ft



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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

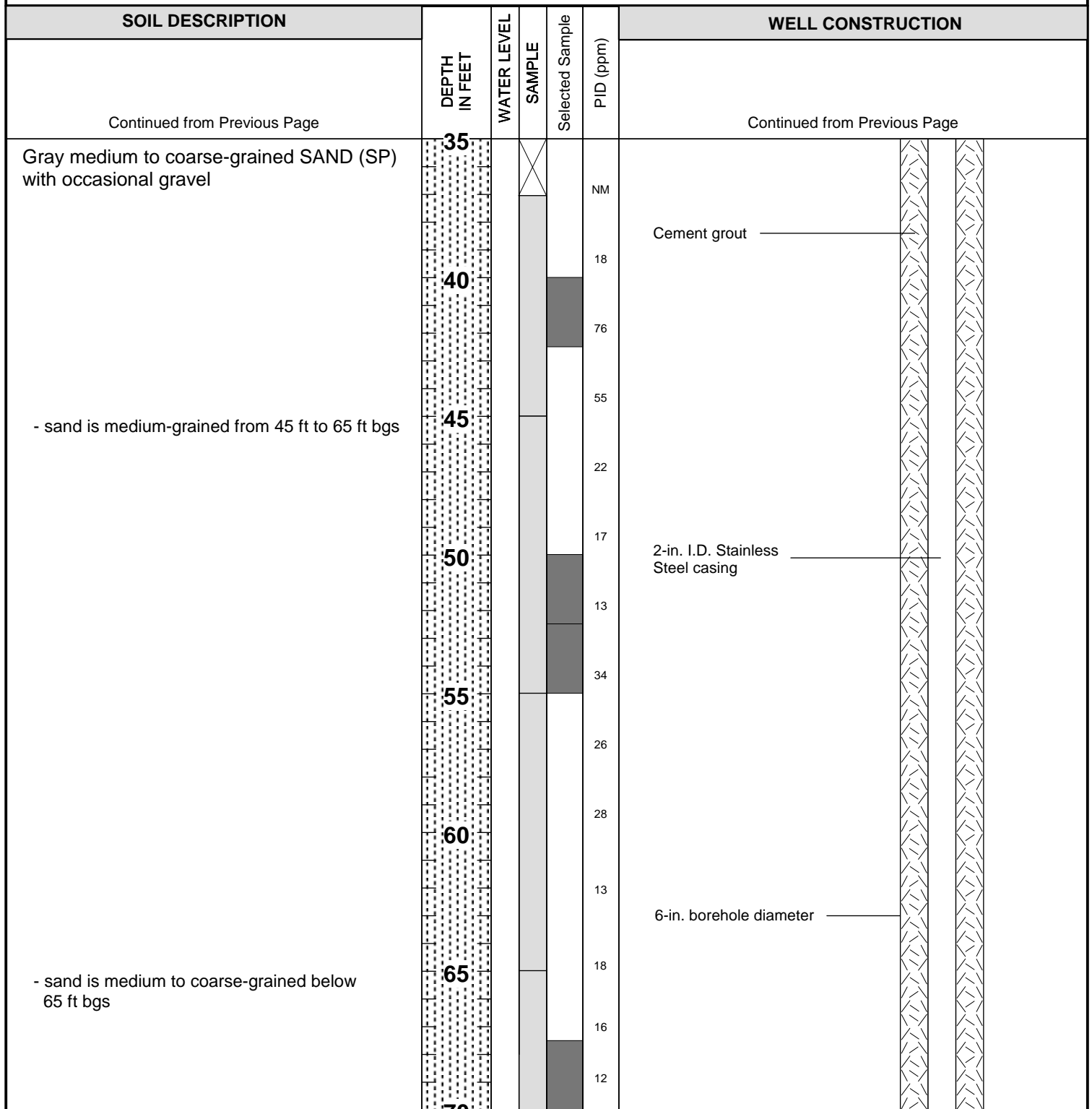
A1-18

Sauget Area 1
Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 1 of 4
 Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 24, 2004
 GROUND SURFACE ELEV: 409.6 ft, MSL
 TOP OF CASING ELEV: 409.21 ft, MSL
 WELL COORDINATES: N 700142.7 ft E 2294318.5 ft



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-18

Sauget Area 1
Sauget and Cahokia, Illinois

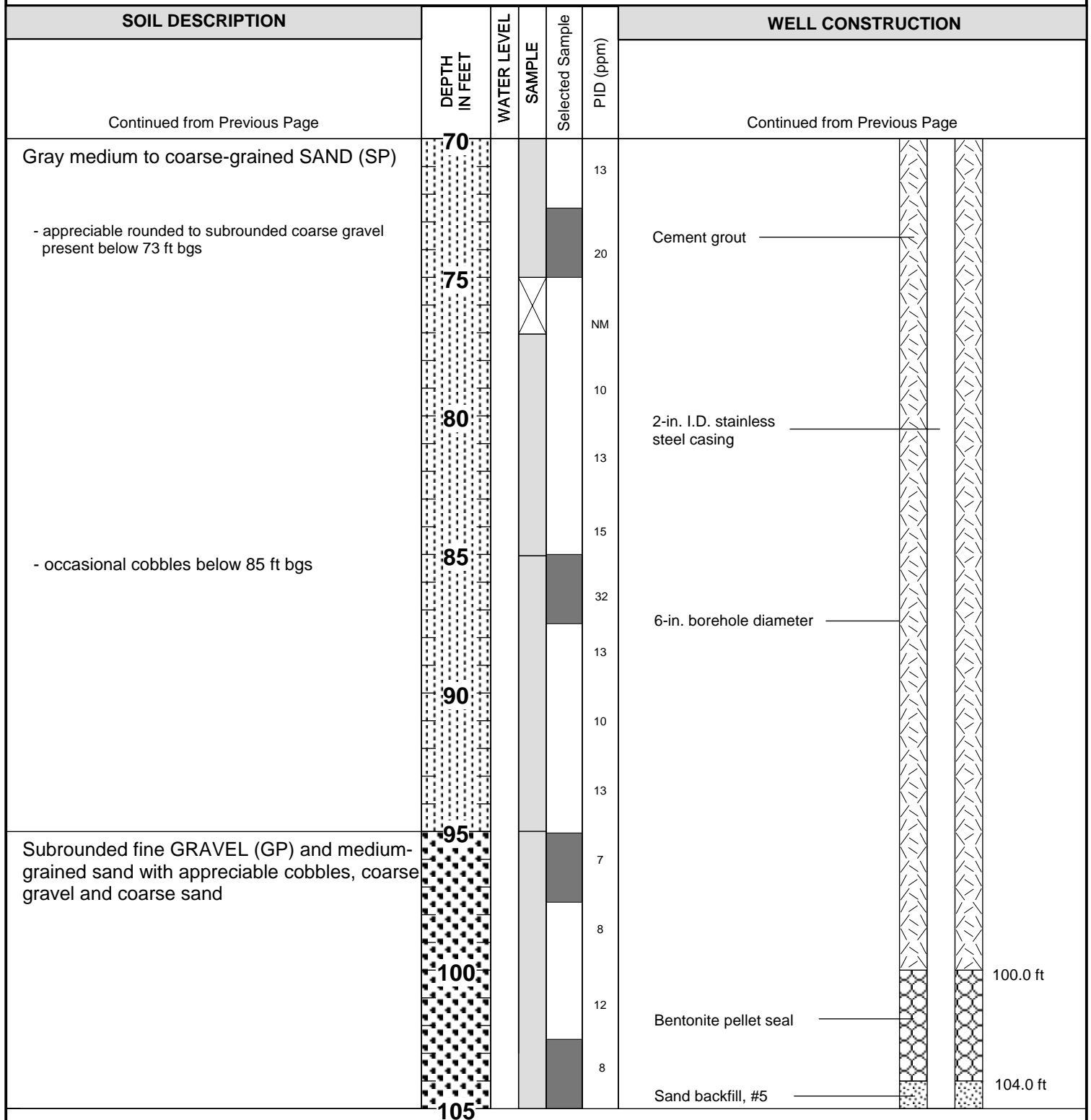
GSI Job No. G-2876

Page 2 of 4

Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 24, 2004
 GROUND SURFACE ELEV: 409.6 ft, MSL
 TOP OF CASING ELEV: 409.21 ft, MSL
 WELL COORDINATES: N 700142.7 ft E 2294318.5 ft



Continued on Next Page

LOG & AS-BUILT DIAGRAM

A1-18

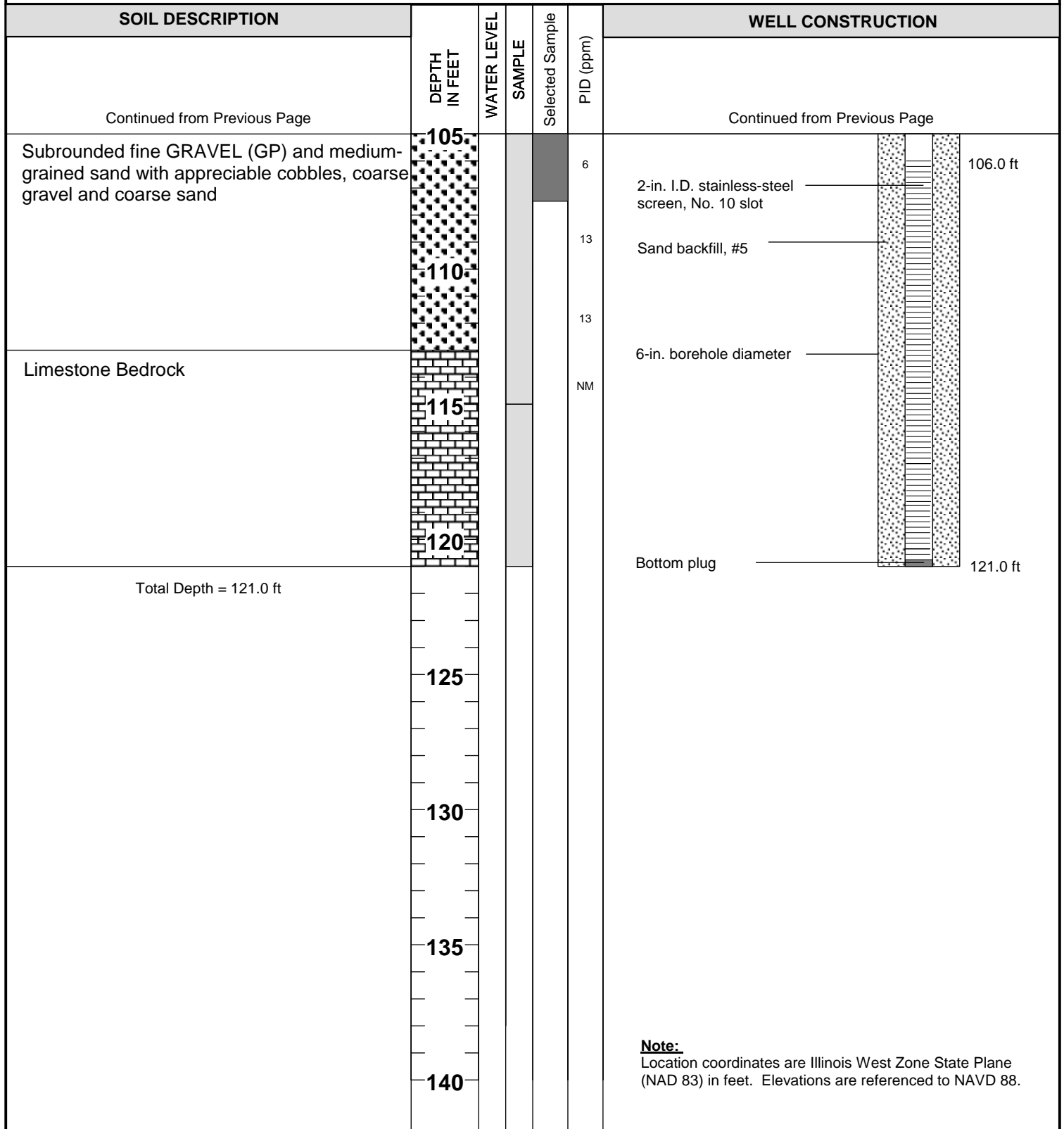
Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 3 of 4
 Issued: 1/21/05



GEOLOGIST: Richard Edwards
 DRILLER: Gerald Sealey (Prosonic Corporation)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: September 24, 2004
 GROUND SURFACE ELEV: 409.6 ft, MSL
 TOP OF CASING ELEV: 409.21 ft, MSL
 WELL COORDINATES: N 700142.7 ft E 2294318.5 ft



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-18

Sauget Area 1
 Sauget and Cahokia, Illinois

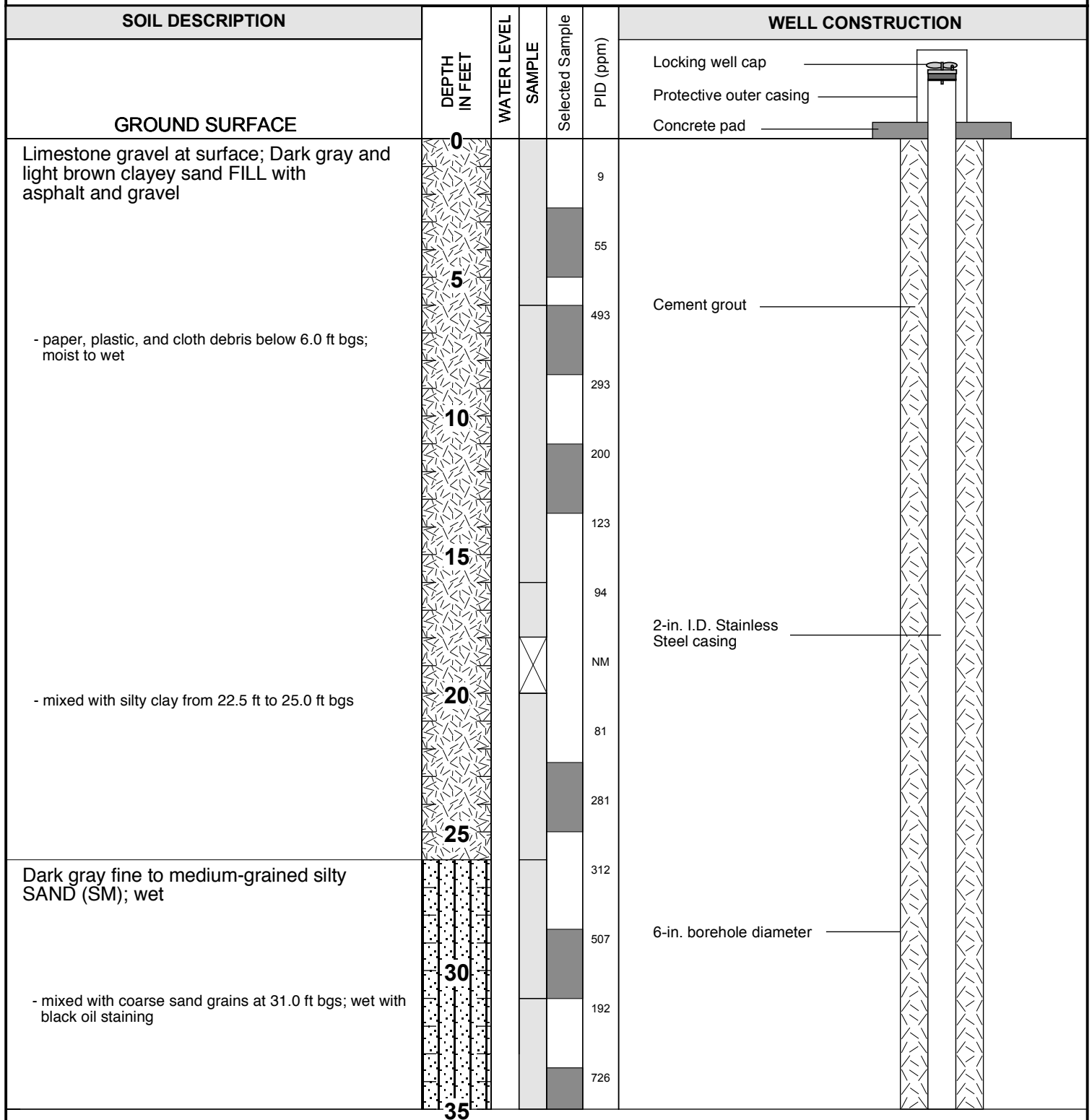
GSI Job No. G-2876

Page 4 of 4

Issued: 1/21/05

GEOLOGIST: Richard Edwards
 DRILLER: Mark Kuchinski (Boart Longyear)
 DRILLING METHOD: Rotosonic
 HOLE DIAMETER: 6 inch (with 7 inch over-ride casing to 32 ft bgs)

COMPLETION DATE: October 12, 2005
 GROUND SURFACE ELEV: Not surveyed
 TOP OF CASING ELEV: Not surveyed
 WELL COORDINATES: Not surveyed



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GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-19

Sauget Area 1
Sauget and Cahokia, Illinois

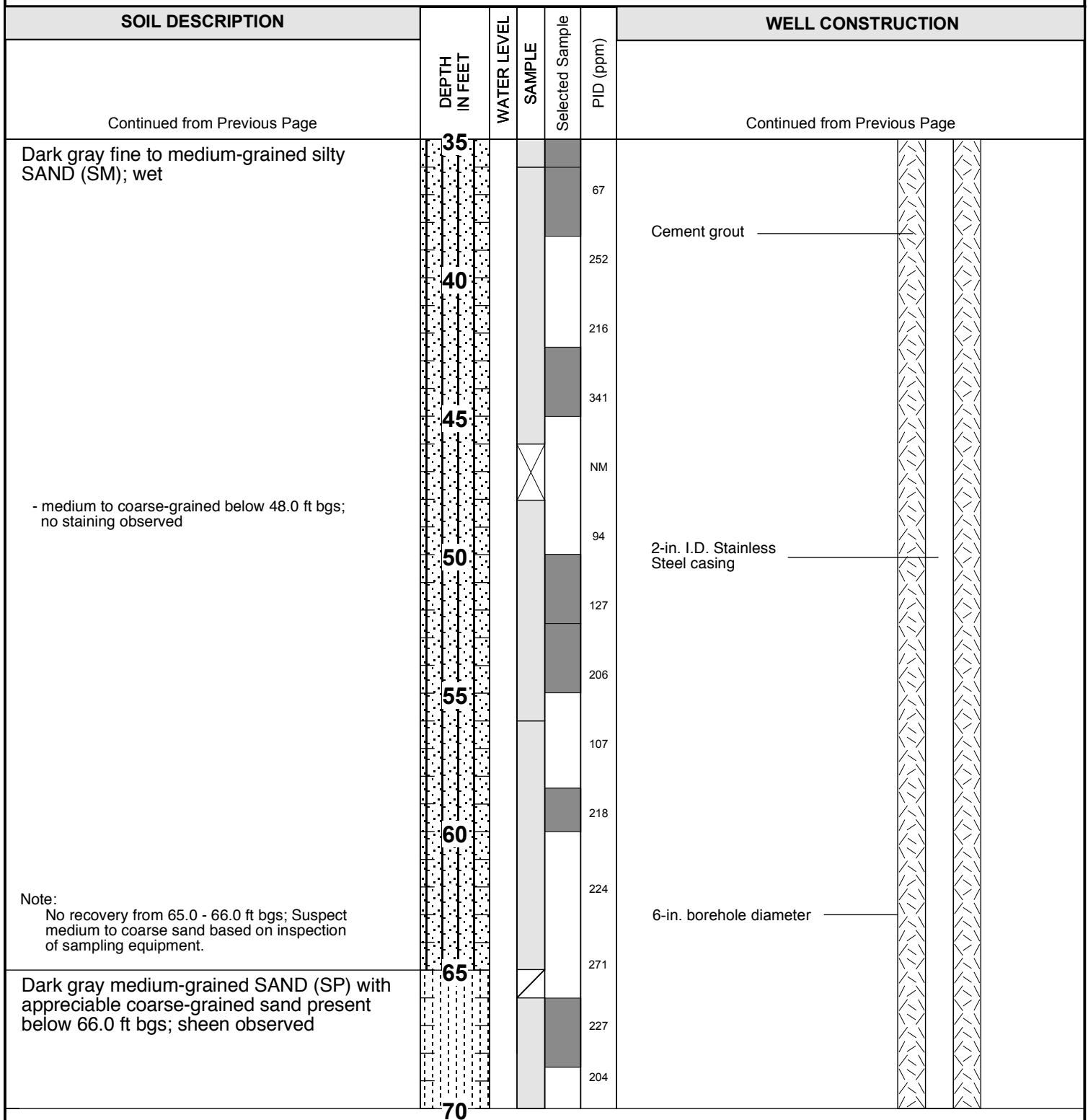
GSI Job No. G-2876

Page 1 of 4

Issued: 1/6/06

GEOLOGIST: Richard Edwards
 DRILLER: Mark Kuchinski (Boart Longyear)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 12, 2005
 GROUND SURFACE ELEV: Not surveyed
 TOP OF CASING ELEV: Not surveyed
 WELL COORDINATES: Not surveyed



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-19

Sauget Area 1
 Sauget and Cahokia, Illinois

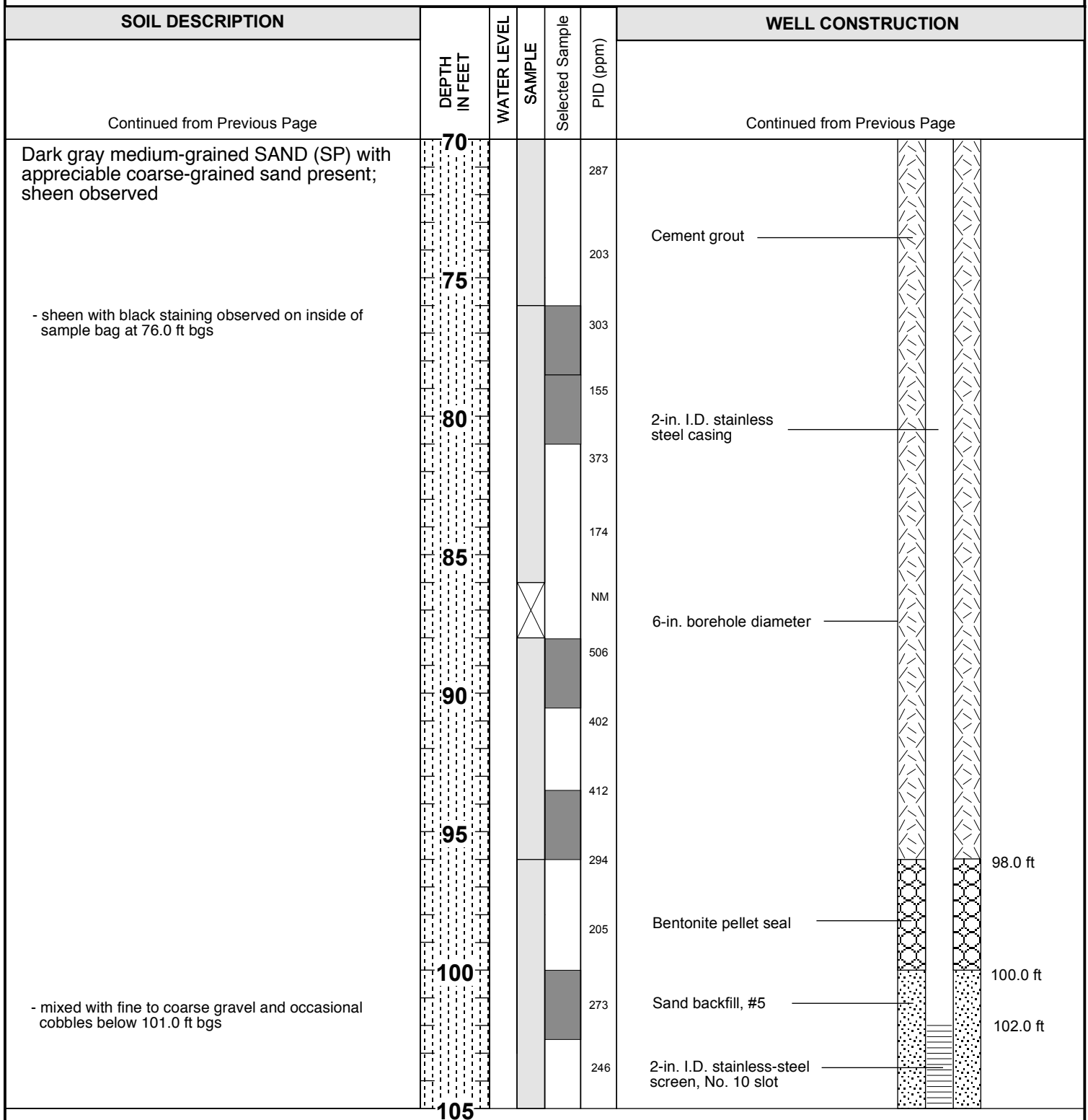
GSI Job No. G-2876

Page 2 of 4

Issued: 1/6/06

GEOLOGIST: Richard Edwards
 DRILLER: Mark Kuchinski (Boart Longyear)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 12, 2005
 GROUND SURFACE ELEV: Not surveyed
 TOP OF CASING ELEV: Not surveyed
 WELL COORDINATES: Not surveyed



Continued on Next Page



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-19

Sauget Area 1
Sauget and Cahokia, Illinois

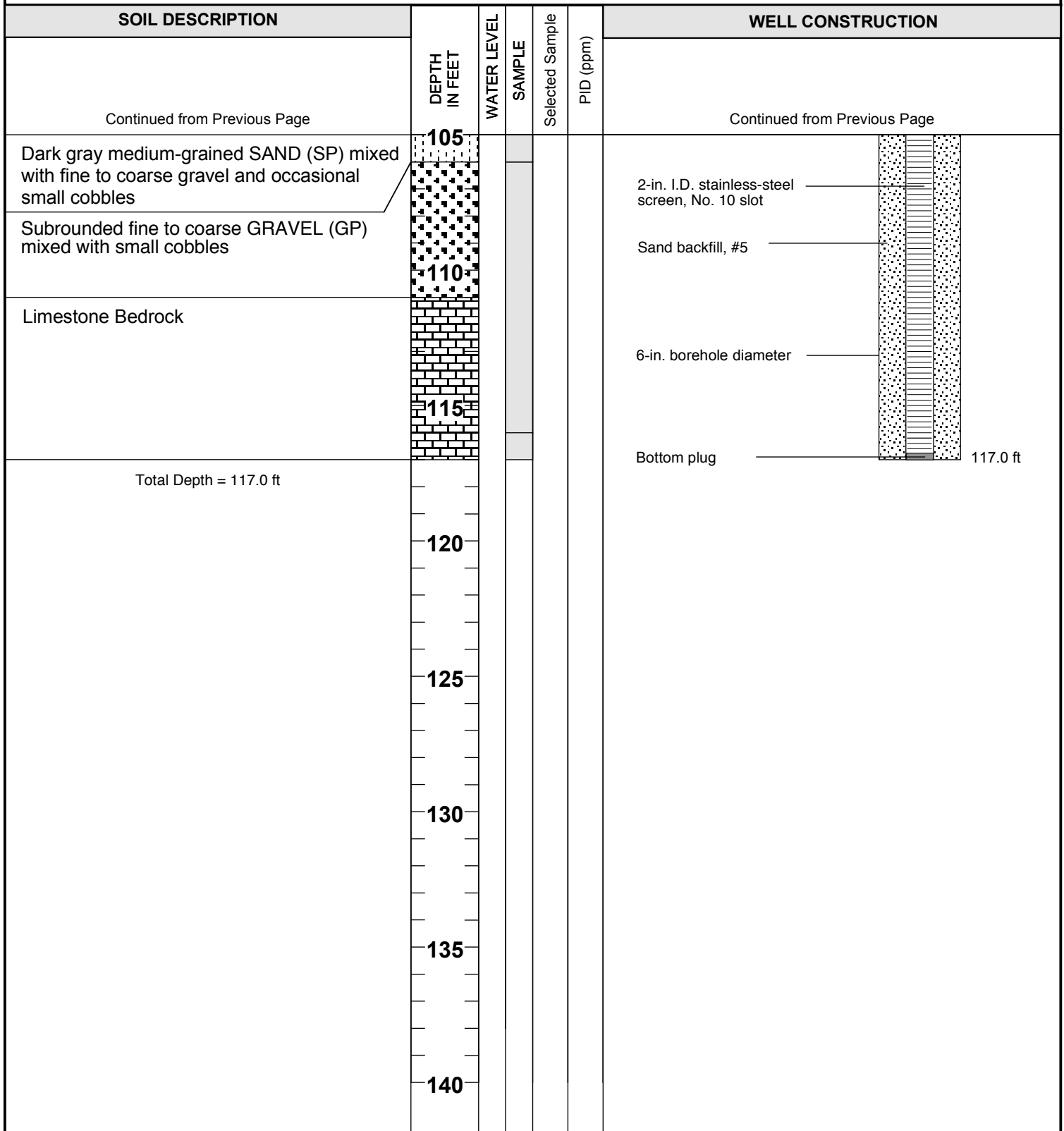
GSI Job No. G-2876

Page 3 of 4

Issued: 1/6/06

GEOLOGIST: Richard Edwards
 DRILLER: Mark Kuchinski (Boart Longyear)
 DRILLING METHOD: Rotasonic
 HOLE DIAMETER: 6 inch

COMPLETION DATE: October 12, 2005
 GROUND SURFACE ELEV: Not surveyed
 TOP OF CASING ELEV: Not surveyed
 WELL COORDINATES: Not surveyed



GROUNDWATER
SERVICES, INC.

LOG & AS-BUILT DIAGRAM

A1-19

Sauget Area 1
 Sauget and Cahokia, Illinois

GSI Job No. G-2876
 Page 4 of 4
 Issued: 1/6/06